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REPORT  
OF THE  
BOARD OF GOVERNORS  
AND  
THE PRESIDENT  
OF THE  
UNIVERSITY OF ALBERTA  
1940-41



UNIVERSITY OF ALBERTA

LIBRARY OF THE UNIVERSITY  
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*To the Lieutenant Governor in Council.*

SIR:

On behalf of the Board of Governors of the University of Alberta, and in accordance with section 29, subsection 2, of an Act respecting the University of Alberta, the undersigned have the honour to transmit through the Minister of Education the Report of the University of Alberta, setting forth the receipts and expenditures for the year ending March 31st, 1941, and the investments as they stood at the end of the fiscal year.

Appended to the Report is the Report of the Retiring President of the University, in which the academic work of the University for the year, July 1st, 1940, to June 30th, 1941, is dealt with in detail.

H. H. PARLEE, *Chairman.*

R. NEWTON, *Acting President.*





# Financial Statement

UNIVERSITY OF ALBERTA

BALANCE SHEET AS AT MARCH 31, 1941

## ASSETS

### FIXED:

Buildings and equipment in service:		
Land, buildings and plant .....	\$3,816,594.91	
Furnishings and equipment .....	867,003.39	
	<hr/>	\$4,683,598.30

### CURRENT:

Cash on hand and in transit .....	\$ 5,485.85	
Cash in Treasury Branch .....	967.94	
Accounts receivable:		
Sundry debtors .....	\$24,475.03	
Less: Reserve for uncollectible accounts .....	2,000.00	
	<hr/>	22,475.03
Interest accrued .....		1,562.50
Inventories and supplies:		
Merchandise held for re-sale .....	\$26,194.65	
Supplies .....	8,894.99	
	<hr/>	35,089.64
		<hr/>
		65,580.96

### OTHER ASSETS:

Livestock on hand .....	\$ 27,542.50	
Deposit: Workmen's Compensation Board .....	3,736.35	
	<hr/>	31,278.85

### PREPAYMENTS:

Insurance unexpired .....	\$ 5,104.02	
Summer school expenses .....	156.74	
	<hr/>	5,260.76

### DEFERRED CHARGES AND CAPITAL LOSSES:

Bond discount and expenses .....	\$ 207,146.58	
Artificial gas plant abandoned .....	12,282.01	
Sundry .....	2,067.16	
	<hr/>	221,495.75

### TRUST:

#### Investments:

	Par Value	Book Value
Dominion of Canada debentures .....	\$ 20,800.00	\$ 21,198.12
Dominion of Canada guaranteed debentures .....	1,500.00	1,500.00
Province of Alberta debentures .....	675,400.00	665,622.35
Province of Alberta debentures past due .....	8,000.00	8,000.00
Province of Alberta guaranteed debentures .....	7,000.00	7,000.00
Province of Alberta savings certificates .....	800.00	800.00
Province of Alberta savings certificates past due .....	16,000.00	16,000.00
Other debentures and shares .....	12,146.68	12,146.68
	<hr/>	<hr/>
	\$741,646.68	\$ 732,267.15

Cash on hand and in transit .....	17,216.16
Cash in bank .....	69,232.79
Loans receivable .....	2,294.80
Accounts receivable .....	1.50
Mortgage interest receivable .....	947.58
Mortgages receivable .....	38,626.72
Real estate and shares, nominal value .....	18.00
	<hr/>

860,604.70

\$5,867,819.32

# LIABILITIES

## CAPITAL AND SURPLUS:

Advances from Province of Alberta .....	\$4,765,303.15
Capital surplus arising from:	
Equipment donated .....	\$ 13,192.63
Sundry sales and bequests .....	2,081.98
Income contributions to new farm and works building .....	2,562.52
Income contributions to library .....	125,397.72

\$143,234.85

Deduct: Revenue deficit as per State- ment No. 76 .....	18,782.54
--	-----------

124,452.31

\$4,889,755.4

## CURRENT:

Bank overdraft .....	\$ 24,654.06
Bank loan .....	7,500.00
Accounts payable .....	53,563.49

85,717.5

## RESERVES:

Premium on Rockefeller grant .....	\$ 18,221.66
Unexpended library fees and donations .....	9,783.60
Workmen's Compensation Board .....	3,736.35

31,741.6

## TRUST:

Rockefeller Foundation .....	\$ 500,000.00
Escheated Estates .....	165,311.17
Carnegie grant in aid of pension fund .....	49,894.37
Sundry endowments, bequests and scholarship grants and amounts administered or held for affiliated organizations and others .....	141,418.52
Trust accounts payable .....	3,980.64

860,604.7

\$9,867,819.3

Edmonton, Alberta, August 5, 1941.

I have audited the books of account of the University of Alberta for the year ended March 31, 1941, and the above Balance Sheet and accompanying Statement of Revenue and Expenditure are in accordance therewith.

Land, buildings, plant, furnishings and equipment are shown at original cost without provision for depreciation. An inventory of furnishings and equipment was not available as at March 31, 1941, but University officials are of the opinion that the value has been maintained by renewals and additions from revenue.

Trust fund investments include Province of Alberta past due debentures and savings certificates of a par value of \$24,000.00. Interest on Province of Alberta direct and guaranteed issues were accepted during the year ended March 31, 1941 at reduced rates as set forth in Chapter 11, Statutes of Alberta (Second Session).

Principal repayments on mortgages receivable were in arrears \$9,626.72 as at March 31, 1941.

Subject to the foregoing remarks, I certify that, in my opinion, the above Balance Sheet is properly drawn up so as to show the financial position of the University of Alberta as at March 31, 1941, and the accompanying Statement of Revenue and Expenditure correctly sets forth the result of operations for the year ended at that date.

CHAS. M. LANG, F.C.A.,

Acting Provincial Auditor.

UNIVERSITY OF ALBERTA  
STATEMENT OF REVENUE AND EXPENDITURE  
FOR THE YEAR ENDED MARCH 31, 1941

REVENUE

Province of Alberta:			
Grant .....	\$ 428,000.00		
Debt charges .....	133,212.38		
			\$ 561,212.38
Rockefeller Foundation .....			12,500.00
General and summer school fees .....			262,864.60
Library fees .....			9,086.20
Garage rentals, net .....			1,571.35
Administration charges recovered .....			1,046.00
Operating departments' net revenue:			
	Revenue	Expenditure	
Rentals .....	\$ 40,408.32	\$ 28,795.86	11,612.46
Dining room .....	63,818.28	55,574.10	8,244.18
Bookstore and post office .....	44,556.20	39,084.78	5,471.42
Printing department .....	30,524.66	26,737.44	3,787.22
	<u>\$179,307.46</u>	<u>\$150,192.18</u>	
			<u>\$ 877,395.81</u>

EXPENDITURE

Salaries:			
Total salaries and wages .....	\$ 668,338.79		
Less: Charged to departments .....	304,953.95		
			\$ 363,384.84
Debt charges .....			133,212.38
Operating departments' net expenditure:			
	Expenditure	Revenue	
Department of Agriculture .....	\$122,876.87	\$ 29,161.94	93,714.93
Provincial and industrial laboratories .....	46,771.36	10,108.86	36,662.50
Department of Extension .....	49,742.95	21,133.70	28,609.25
Power plant .....	52,605.98	26,584.68	26,021.30
Department of Dentistry .....	16,785.20	3,680.29	13,104.91
Department of Pharmacy .....	10,783.31	970.26	9,813.05
Works department .....	49,563.04	48,675.45	887.59
	<u>\$349,128.71</u>	<u>\$140,315.18</u>	
Maintenance and repairs .....			46,902.78
Pensions .....			21,609.44
Instruction laboratories .....			20,746.55
Special clinical services .....			17,500.00
Research Council .....			11,316.11
School of Education .....			13,501.45
Provision for library extension .....			9,086.20
Summer school .....			9,431.99
Calendars, press bulletins, etc. ....			2,720.45
Rent .....			2,571.44
Printing and stationery .....			2,272.69
Telephone and telegrams .....			2,292.06
Library .....			1,819.64
Insurance .....			2,879.68
Travelling expenses .....			1,822.25
Postage and excise .....			1,199.41
Provost .....			1,035.35
Upkeep of cars .....			879.21
Inspection and repair of office machines .....			549.08
Bank interest .....			274.15
Scholarships and medals .....			470.40
Physical education .....			223.14
Sundry .....			2,472.48
			<u>\$ 878,986.70</u>
Excess of expenditure over revenue for the year ended March 31, 1941 .....			<u>\$ 1,590.89</u>



## DEFICIT ACCOUNT

FOR THE YEAR ENDED MARCH 31, 1941

Deficit at March 31, 1940 .....	\$ 17,636.
Add:	
Sundry adjustments of previous years' revenue .....	273.
	<hr/>
	\$ 17,909.
Less:	
Sundry adjustments of previous years' expenses .....	717.
	<hr/>
	\$ 17,191.
Add:	
Excess of expenditure over revenue for the year ended March 31, 1941 .....	1,590.
	<hr/>
Deficit at March 31, 1941 .....	<u>\$ 18,782.</u>

APPENDIX

THE REPORT OF THE PRESIDENT

*To the Board of Governors  
of the University of Alberta.*

GENTLEMEN:

I have the honour to submit Dr. W. A. R. Kerr's report on the academic work of the University of Alberta for the year ending June 30th, 1941.

Dr. Kerr retired from the presidency on September 1st, 1941. The University had completed only one session of its history, when it was joined by Dr. Kerr in 1909 as Professor of Modern Languages. Five years later he was appointed Dean of the Faculty of Arts and Science, a position he filled with distinction until he was called to the presidency in 1936. Dr. Kerr thus played a prominent role in the development of the University from the outset. He will look back with satisfaction on large accomplishments, and the University and its alumni will remember him with gratitude.

ROBERT NEWTON,  
*Acting President.*





# The Report of the President

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Before submitting detailed information concerning registration and other matters relating to the work of the University during the past session together with the annual reports of administrative officers, I desire to make some general observations touching the progress of the institution as a whole during the academic year which has just elapsed.

## *Registration.*

The total registration of students for the current academic year has amounted to 2,254, a decrease of 75 from the session of 1939-40, a much smaller reduction than might have been expected considering the number of young men who have answered the call to the colours.

Thirty-six students are pursuing graduate work elsewhere, distributed among the following universities and colleges:

University of British Columbia, Bryn Mawr College, University of California, California Institute of Technology, University of Chicago, Cornell University, Harvard University, Massachusetts Institute of Technology, McGill University, University of Minnesota, Northwestern University, Ohio State College, University of Oklahoma, Princeton University, University of Toronto, Washington State College, University of Washington, University of Western Ontario, University of Wisconsin.

Last summer, as a result of consultation between executive officers of the Canadian universities and representatives of the Department of Defence, it was agreed that all men students physically fit should be required to undergo military training, whether in the C.O.T.C. or in an Auxiliary Battalion. The students loyally conformed to this serious addition to their academic studies and, throughout the winter, military work was patriotically pursued to the satisfaction of the Officer Commanding, Lieutenant-Colonel P. S. Warren, and of the inspecting officers. It is of some interest to note that only one recalcitrant man was finally reported to the Alberta War Services Board. His case was dealt with by that authority.

The changes in our teaching personnel have not been so extensive or so serious as in the preceding year.

Owing to the enlargement of the entering quota in Applied Science it was necessary to secure additional teaching assistance in that faculty and besides to take over the old Garneau High School building for the further physical accommodation required. Temporary appointments had also to be made in the departments of Entomology and English to replace Professor Strickland and Dr. Tracy, who joined the C.A.S.F.

It will be recalled that some ten years ago it became necessary, owing to the incidence of the great depression, to ask our staff to submit to a serious horizontal reduction in salaries. These deductions, regarded at first as temporary, have finally run over upwards of a decade, putting a great strain on the loyalty and esprit-de-

corps of the staff. The Board of Governors have long been concerned about this situation, but it was not till within the past three years that it was possible to take initial practical steps to solve the problem of the restoration of salaries. It is a pleasure, therefore, now to announce that the Government has enabled the Board to do this.

There is no form of educational endowment in which Canada is weaker than in the provision of scholarships. These aids enable young men and women of ability and character, but who are lacking in financial resources, to receive that intellectual training without which a career nowadays is discouragingly difficult. It is certainly also on the other hand in the fundamental interests of the state that every citizen should be educated to the limit of his individual capacity. It is therefore a great pleasure to express the University's gratitude to the Provincial Chapter of Alberta, Imperial Order Daughters of the Empire, for their gift of three additional matriculation scholarships of the value of \$400.00 each—making six scholarships in all provided annually by the Order.

The Banff School of Fine Arts enjoyed last summer its most successful season. Its enrolment rose to 144 regular students and, in addition, there was a special class in colloquial French numbering thirty. The comfortable housing in the new theatre-hall has made the operation of the school easy and satisfactory. The University is deeply grateful to the Carnegie Corporation for a further gift of \$5,000 spread over three years, which has enabled us to institute for the first time courses in ceramics and weaving, an initiative which promises to attract an interested following.

A year ago, I referred to the common misapprehension that for a good part of the twelve months the University and its plant lie fallow. I mentioned that for the most of the summer season varied educational activities occupied the University buildings. In addition to those alluded to at that time, we were glad to accede to the request of the Department of National Defence to train one hundred and twenty young radio technicians. The course, the duration of which covered the summer months, was given by an instructional staff headed by Professor E. G. Cullwick, head of our department of Electrical Engineering. It is permissible to state that the purpose of the school was to train young men to operate the new device for the spotting of raiding planes by night.

A year ago, I referred to the fact that the plant of the University's Radio Station CKUA was practically worn out and I stated at that time that, if the Station was to remain on the air, the whole physical equipment would have to be completely rehabilitated.

Negotiations were initiated with the Government which promised to give the University the necessary financial assistance as a result of which a new modern station has been erected on the Calgary Trail some three miles south of the city limits.

The College of Education has now completed its first year in its new form and congratulations are due to Principal LaZerte and his colleagues for the encouraging success of the past session. The enrolment of the College has substantially risen and the sphere of its activities and influence is obviously expanding.

As a war measure and in response to the urgent request of the Department of National Defence, the three University residences, Pembina Hall, Athabaska Hall

and Assiniboia Hall, were turned over to the military authorities to be used as dormitories for the trainees at the No. 4 Initial Training School of the R.C.A.F.

Residences such as ours, which contain an infirmary and a gymnasium as well as kitchens and dining-rooms, present a very complex set of factors.

Although the surrender of the University residences to the Department of National Defence offered serious difficulties, our Board of Governors had no doubt where its patriotic duty lay and at once met the Government's request for the use of this portion of University property, but reserved as necessary parts of the University organization the Infirmary and Gymnasium for the use of our students.

The surrender of the residences means a heavy sacrifice for us in the field of social education, but I feel sure that our students will face the situation—a straight product of the war—as it develops.

I cannot close without referring gratefully to the loyalty and self-sacrifice of the staff throughout a year that has presented its own difficulties. The tenseness of the atmosphere caused by the war has been felt by all—teacher and taught. It is obviously the duty, however, of the members of an institution such as this to act, so far as possible, as a steadying influence at a time when the very foundations of our civilization are under savage challenge and ruthless attack.

The following are the statistics with reference to the teaching staff during the year:

*Full-Time Staff:*

(a) (b) Professors .....	51
Associate Professors .....	13
(c) Assistant Professors .....	15
(d) Lecturers .....	22
Instructors .....	8
Demonstrators and Assistants .....	9
<hr/>	
Total .....	118
(a) 1 on sick leave.	
(b) 3 on leave for War Service.	
(c) 1 on leave for War Service.	
(d) 3 on leave for War Service.	

*Part-Time Staff:*

Professors .....	12
Associate Professors .....	4
Assistant Professors .....	9
(d) Lecturers .....	20
(e) Instructors .....	11
(f) Demonstrators and Assistants .....	70
<hr/>	
Total .....	126
(d) 2 on leave for War Service.	
(e) 2 on leave for War Service.	
(f) 7 on leave for War Service.	

*Library:*

Librarian .....	1
Assistants .....	6
Sessional help .....	6
<b>Total</b> .....	<b>13</b>

*Extension Department:*

Director .....	1
Librarian .....	1
Lecturer .....	1
<b>Total</b> .....	<b>3</b>

*Department of Industrial Research:*

Research Professor .....	1
Assistant Research Professor .....	1
Assistants .....	1
<b>Total</b> .....	<b>3</b>

*Industrial Laboratory:*

Director .....	1
Assistant .....	1
<b>Total</b> .....	<b>2</b>

**REGISTRATION BY FACULTIES**

As distributed in the various faculties and schools the numbers are as follows:

<b>Total registration</b> .....	<b>2254</b>
1. Arts and Science .....	751
B.A. and B.Sc. ....	406
School of Commerce .....	84
School of Household Economics .....	88
Auditors .....	6
Special .....	3
Combined Courses:	
Arts and Medicine .....	109
Arts and Dentistry .....	27
Arts and Law .....	24
Arts and Agriculture .....	1
Arts and Commerce .....	3
.....	164
2. Applied Science .....	317
Including Chemical, Civil, Mining, Electrical Engineering and Engineering Physics.	
3. Agriculture .....	156
4. Law .....	59

5. Medicine .....	453
Medicine .....	201
Dentistry .....	52
Pharmacy Degree .....	16
Pharmacy Licentiate .....	36
Nursing Degree .....	89
Nursing Diploma .....	59
6. College of Education .....	51
7. Divinity .....	15
8. Summer Session (1940) .....	397
9. Short Course in Agriculture .....	19
10. Graduate Students .....	122
Arts and Science:	
M.A. ....	22
M.Sc. ....	21
	— 43
Agriculture:	
M.Sc. ....	11
	— 11
School of Education:	
M.A. (Educ.) ....	13
B.Educ. ....	33
M.Educ. ....	7
	— 53
Special .....	15
	<hr/>
Total .....	2340
Less duplicates in Summer Session .....	86
	<hr/>
Total .....	2254

## GIFTS, SCHOLARSHIPS AND PRIZES

### Gifts:

From the National Research Council: For research in Agriculture in the departments of Field Crops and Soils, \$9,954.19. For research in Medicine in the department of Biochemistry, \$1,310.00. For research in Electrical Engineering (W.T. and Sd. Project P1000—S), \$375.00.

From the Department of Agriculture, Dominion Government: For research in Agriculture, \$500.00.

From the Department of National Health, Dominion Government: For a nutritional survey by the department of Biochemistry, \$800.00.

From the Rockefeller Foundation: For research in the department of Zoology, \$1,500.00. For research in the department of Chemistry, \$500.00.

From the Carnegie Corporation: For the Banff School of Fine Arts, \$2,500.00.

From the United Grain Growers: For the Alberta School of Community Life, \$500.00. For research in Agriculture, department of Field Crops, \$1,000.00.

From the Alberta Wheat Pool: For the Alberta School of Community Life, \$500.00. For research in Agriculture, department of Field Crops, \$100.00.



From the C.I.B.A. Company of Montreal: For research in Biochemistry, \$1,000.00.

From the Canadian Industries and the Bayer-Semesan Company of Wilmington, Del.: For research in Agriculture, \$600.00.

From the College of Physicians and Surgeons of Alberta: For the Medical Library, \$200.00. For the purchase of medical history material through Dr. Heber Jamieson, \$75.00.

The collections in the department of Geology have been increased appreciably by gifts of minerals, rocks, ores, fossils, oils, photographs and books. Most of these donations have been received from about nineteen graduates and senior students of the University of Alberta. The gifts received during the year represent a value of about \$200.00. Among them are several specimens of the rarer minerals from the Northwest Territories and these are regarded as strategic war minerals.

From the Students' Council of the University of Alberta: The gift of \$750 as a contribution towards the setting up of an athletic room in Athabaska Hall.

From the Edmonton Horticultural Society: A gift of \$50.00 to be used towards the maintenance of test plots under the supervision of the Department of Horticulture.

From the Graduating Class of '40: The gift of a permanent amplification system, with two speakers, for Convocation Hall.

### **Scholarships:**

Mr. J. S. McLean of Toronto has again given the sum of \$1,000.00 to continue the McLean Bursaries, eight of which to the value of \$125 each he established in 1940-41. These bursaries are awarded on the basis of academic record and financial need and are open to students from farm homes and are tenable in any faculty of the University.

The Provincial Chapter of Alberta, Imperial Order Daughters of the Empire, has generously offered three additional matriculation scholarships of the value of \$400 each, making six in all. The candidate must be the child of a man or woman who served overseas with the British forces during the Great War and must have resided in the province of Alberta for at least three years prior to application.

### **Prizes:**

A prize of \$15.00 has been offered by Mr. Justice O'Connor in memory of his mother, Maria Isabel O'Connor, to be awarded annually to the student in the second year of Household Economics who takes the highest standing in Household Economics 55.

## **PUBLICATIONS BY STAFF**

By the Acting President, Dr. R. Newton: "The Wise Utilization of Our Resources: Agriculture and Forestry," Transactions Royal Society of Canada (in press), May, 1941.

### **Department of Anatomy.**

The following work has been published under the sponsorship of this department:

By S. Hartroft: "The Vascular Development of the Kidney", Transactions of the Royal Society (in press), June, 1941.

### **Department of Animal Husbandry.**

By J. P. Sackville and R. D. Sinclair: "Cattle Finishing in Alberta", University of Alberta Bulletin No. 34, pp. 1-34, October, 1940.

By R. D. Sinclair: "Swine Production in Alberta", University of Alberta Bulletin No. 22 (5th edition), pp. 1-101, June, 1941.

### **Department of Biochemistry.**

By G. Hunter and L. B. Pett: "A Dietary Survey in Edmonton", Canadian Journal of Public Health, 32, pp. 259-265, 1941.

By M. M. Cantor: "Endocrinology—The History of an Idea", The Question Mar, 8, pp. 11-14, 1941.

By L. B. Pett: "The Vitamin Chart", Canadian Medical Association Journal, 44, pp. 181-182, 1941. "Mobilization of Vitamin A by Alcohol", Science 92, p. 63, 1940.

By L. B. Pett and Marian K. Lipkind: "Factors Affecting the Pett Visual Test for Vitamin A Deficiency", Canadian Journal of Research, 19, pp. 99-108, 1941.

### **Department of Botany.**

By E. H. Moss: "Interxylary Cork in *Artemisia* with a Reference to its Taxonomic Significance", American Journal of Botany, 27, pp. 762-768, 1940.

### **Department of Chemistry.**

By H. R. Thornton, F. McClure and R. B. Sandin: "Reduction in Resazurin in Milk and Aqueous Solutions", Canadian Journal of Research, 13, 19, pp. 39-41, 1941.

### **Department of Civil Engineering.**

By C. A. Robb: "Cost Problems Relating to Power", Cost and Management, pp. 430-434, March, 1941. "Gauges for Mass Production", The Engineering Journal, 24, pp. 180-184, April, 1941. "Recompression Phenomena in Steam Nozzles", The Canadian Journal of Research, Part I, May; Part II, June, 1941.

### **Department of Dairying.**

By H. R. Thornton: "The Standardization of NAT 2", Report to the Commission on Standardization of Biological Stains, July, 1940.

By H. Wolochow, H. R. Thornton and E. G. Hood: Joint publication with the Division of Bacteriology and Dairy Research, Science Service, Department of Agriculture, Ottawa. "The Bacteriological Analysis of Creamery Waters", Canadian Dairy and Ice-Cream Journal 20: pp. 23-25, 1941.

By H. R. Thornton, F. McClure and R. B. Sandin: Joint publication with the Department of Chemistry—"The Reduction of Resazurin in Milk and Aqueous Solutions", Canadian Journal of Research B. 19, pp. 39-48, 1941.

### **Department of Dentistry.**

By H. A. Gilchrist: "Stabilized Impressions," Journal of Canadian Dental Association, pp. 293-297, June, 1941.

By W. S. Hamilton: "Ultra-Violet Sterilization of Instruments," Journal of Canadian Dental Association, pp. 124-125, March, 1941.

By G. A. Gemeroy: "Sulfanilamide", Journal of Canadian Dental Association, pp. 385-389, August, 1940.

### **Department of Education.**

By M. E. LaZerte: "Survey Tests in Mathematics." Separate tests for Grades II to IX inclusive, published by the Alberta Teachers' Association, November, 1940. "Report on Survey Tests in Arithmetic", A.T.A. Magazine, p. 22, February, 1941. "Canadian Council for Educational Research", The School, Toronto, Elementary Edition, January, 1941, pp. 430-433. The School, Toronto, Secondary Edition, January, 1941, pp. 430-433.

By H. E. Smith: "The New Education in Alberta", The School, Toronto, Elementary Edition, November, 1940, pp. 187-191. The School, Toronto, Secondary Edition, November, 1940, pp. 187-191. "Home and School Associations", Alberta Teachers' Association Magazine, March, 1941, pp. 17-18; April, 1941, p. 15; May, 1941, pp. 15-16.

### **Department of Electrical Engineering.**

By E. G. Cullwick: "Electro-Magnetism, H. A. Wilson's Experiment on a Magnetic Insulator", Electrician (London), v. CXXV, October 18, 1940, pp. 203-205.

### **Department of English.**

By R. K. Gordon: "Le Voyage d'Abbotsford", Transactions of the Royal Society of Canada, Third Series, Section 2, v. XXXIV, 1940, pp. 71-85.

By C. R. Tracy: "The American Scholar To-day", Queen's Quarterly, v. XLVIII, No. 2, 1941.

### **Department of Field Crops.**

By A. G. McCalla and Nils Gralén: "Gluten Protein", Nature, 146:60-61, 1940.

By J. D. McCaig and A. G. McCalla: "Changes in the Physical Properties of Gluten with the Aging of Flour", Can. J. Res., C 19:163-176, 1941.

By F. H. Peto and J. W. Boyes: "Comparison of Diploid and Triploid Sugar Beets", Can. J. Res., C 18:273-282, 1940.

### **Department of Geology.**

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### **Department of Horticulture.**

By J. S. Shoemaker: "Celery in Alberta", University of Alberta, Bulletin 35, pp. 1-52, 1940.

### **Department of Household Economics.**

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### **Faculty of Law.**

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### **Department of Mathematics.**

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### **Department of Medicine.**

By P. H. Sprague: "A Case of Temporal Arteritis", Journal Canadian Medical Association, 43, 6, pp. 562-564, December, 1940.

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### **Department of Philosophy.**

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By D. Smith: "Variability of the Placing Reactions in the Rat", Bulletin of the Canadian Psychological Association, v. 1, pp. 12-13, 1940.

### **Department of Physiology and Pharmacology.**

By J. Ferguson: "A Study of the Nerve-Free Smooth Muscle of the Amnion of the Chick", American Journal of Physiology, v. 131, No. 2, December, 1940, pp. 524-535.

### **Department of Political Economy.**

By G. A. Elliott: "The Economist in Modern Society", Manitoba Arts Review, Spring, 1941, pp. 63-70.

By A. Stewart: "More Farmers for Western Canada", Institute of International Affairs, Contemporary Affairs Series, Pamphlet No. 9, April, 1941, pp. 1-30.

### **Department of Poultry.**

By D. R. Clandinin: "Diseases of Poultry", Circular No. 9, University of Alberta, pp. 1-59, 21 illustrations.

### **Department of Industrial Research.**

Fuels Division—By E. Stansfield, W. A. Lang, J. E. Oberholtzer.

Geology Division—First Annual Report of the Research Council of Alberta. Tabled in the Legislature but not yet published.

### **Department of Soils.**

By F. A. Wyatt, J. D. Newton, W. E. Bowser and W. Odynsky with Appendix by J. A. Allan: "Soil Survey of Milk River Sheet", University of Alberta Bulletin 36, April, 1941.

By V. Ignatieff: "Determination and Behaviour of Ferrous Iron in Soils", Soil Science, v. 51, No. 4, pp. 249-263, April, 1941.

By R. E. Carlyle, A. G. Norman and L. A. Richards: "Microbial Thermogenesis in the Decomposition of Plant Materials. Part I. Adrabatic Fermentation Apparatus", Journal of Bacteriology, v. 41, No. 6, pp. 689-697, June, 1941.

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**EXCERPTS FROM THE REPORTS OF ADMINISTRATIVE OFFICERS**

The following excerpts from the reports of administrative officers give some indication of the broad scope of the work of the University.

**Report of Dean G. M. Smith of the Faculty of Arts and Science**

1—*Registration, 1940-1941.*

During the regular academic session, 1940-41, 751 students have been registered in the Faculty of Arts and Science as compared with 783 in 1939-40. Registration has increased only in the combined courses leading to Medicine and Dentistry.

2—*Recommendations for degrees, May, 1941.*

The number of students recommended by the Faculty of Arts and Science for degrees, in May, 1941, is as follows:

For the B.A. Degree .....	81
For the B.Sc. Degree .....	57
For the B.Commerce Degree .....	28
For the degree of B.Sc. in Household Economics .....	25
	<hr/>
	191

3—*Legislation, 1940-41.*

There has been no new legislation of major importance during the year.

4—*Enlisted Students.*

Certain minor deficiencies of enlisted students have been overlooked and minor concessions granted. Also students of good standing who have been called for Active Service in March and April and have been unable to write some or all of their examinations have been recommended for their degrees or for complete standing in their years. Others, whose work has been satisfactory in certain courses have been granted standing in these courses. The attitude of Council has been that enlisting students should know the official view of their academic status at the time of enlistment and that where concessions are possible they should be made at that time or soon as possible thereafter.

5—*Military Training.*

The great majority of the students have loyally observed the rules of the Senate in respect of military training in the Officers' Training Corps or in the Auxiliary Battalion. A small number of students were in arrears late in the session but all

but one student in Arts and Science had removed all deficiencies before 30th April by attending special parades.

The increase or decrease in registration in each division of the faculty as compared with registration in 1939-40 follows:

B.A. ....	—24
B.Sc. ....	—12
B.Commerce ....	—15
B.Sc. in Household Economics ....	— 7
B.H. Economics ....	— 2
B.A. and B.Commerce ....	No change
B.A. and M.D. ....	—19
B.Sc. and M.D. ....	—46
B.A. and D.D.S. ....	— 1
B.Sc. and D.D.S. ....	—11
B.A. and LL.B. ....	—15
B.A. and Applied Science ....	— 1
B.A. and Agriculture ....	— 3
B.Sc. and Agriculture ....	— 2
Partials ....	— 3

### Report of Dean R. Newton of the Faculty of Agriculture

In this University, as in other Canadian Universities, the Faculty of Agriculture combines two functions: (1) academic, (2) the operation of an agricultural experiment station.

#### 1—*Academic.*

While the registration of freshmen dropped to 56 from last year's peak of 71, the total faculty registration of 156 undergraduates was the largest to date. The graduating class of 26 is also the largest yet. The high average quality of these graduands was commented upon by the committee appointed to allocate the gold medal offered by the Alberta Branches of the Canadian Society of Technical Agriculturists. They found seven students with a standing equal to or better than that of the 1940 medal winner. The three graduating students taking honours courses all attained first class honours.

Again this year, continuing a custom of several years, the Alberta Wheat Pool helped to launch the graduands on their professional career by paying their initial membership fees in the Canadian Society of Technical Agriculturists.

Five of the twelve agricultural students proceeding to the degree of Master of Science in the School of Graduate Studies completed their work, one each in Dairying, Horticulture and Soils and two in Field Crops.

The fourth annual three-day course for Land Inspectors was devoted mainly to soil problems, and brought out a registration of seventy-one. The annual four-week Creamery Course, limited to twenty experienced buttermakers, was given as usual in co-operation with the Provincial Dairy Branch. A two-week course for Factory Cheesemakers was given with the further co-operation of the Dairy Produce Division of the Dominion Department of Agriculture. This new departure was a timely contribution to the Dominion-wide effort to send Britain more cheese.

During the year we had suggestions from outside bodies desirous of engaging help with special technical qualifications that we should be training at least a few



specialists in agricultural economics, poultry and irrigation. As yet we have not graduated any specialists in these fields. Our attention was also called to the increasing shortage of dairy technicians, partly due to heavy enlistment and partly to the growth of the industry.

We established this year in co-operation with the Canadian Society of Technical Agriculturists a Committee on Professional Experience to help students find summer employment which supplements their academic training in a useful way.

Henceforth, all students will be required to spend a minimum of four years at the University to complete the work for the B.Sc. in Agriculture. Students from the Provincial Schools of Agriculture, who have been able hitherto to graduate after three years of work, are not penalized by this change, since Grade XI standing, plus a certificate from a School of Agriculture, will be accepted in lieu of the Grade XII standing required of other students.

## 2—*Experimental Work.*

The department of Soils completed their field survey of the area covered by the Calgary and Blackfoot map sheets; and their report on the Milk River sheet has been printed. This work is largely financed by the Dominion Department of Agriculture, and at present is concentrated on marginal areas where readjustment of settlement may be necessary.

The department of Field Crops completed a five-year survey of the milling and baking quality of wheat varieties grown in different soil zones, and is launching a new survey designed to establish the comparative suitability of these wheats for new industrial uses, something very important in the crisis caused by the wheat surplus. The adjustment to changed agricultural conditions inspired also renewed activity in the production of drought-resistant forage plants for the south and a better-adapted flax for the north. Ferax alfalfa, a new heavy-seeding variety the result of seventeen years' breeding, has been distributed in small quantity this spring. Much of the work in Field Crops is supported from outside sources.

The Department of Agricultural Engineering has co-operated in prairie farm rehabilitation work, with special reference to the investigation of machinery problems in power farming.

Low prices and shrinking markets are forcing an increasing degree of self-containment on western farmers. This increases the importance of home-grown fruits and vegetables, of farm flocks of poultry and sheep, and of milk cows. These matters are much in the minds of the departments concerned. This is not usually thought of as a tree-fruit country, yet the University experimental orchards yielded in 1940 about 7,000 pounds of fruit.

The department of Poultry is co-operating with the Provincial Poultry Branch in studies on the hatchability of eggs, something which often makes the difference between profit and loss in poultry raising.

The department of Animal Husbandry has completed co-operative studies on cobalt deficiency in sheep nutrition, the cause of so-called "bush sickness". The Dominion Department of Agriculture contributed \$3,500 to this work. The relation of nutrition to anaemia in winter-farrowed pigs is now under investigation, not only to protect the supply of Wiltshire bacon to beleaguered Britain, but also to save from extinction the profits in hog-raising, at present the one economic star in the agricultural firmament. Still further to support the necessary trend towards greater diversification in western agriculture, a new project has been launched with

the object of demonstrating the profitableness of a grade herd of dual purpose (milk and beef) animals.

Feeder's Day, now in its twentieth year, and the annual meetings of breed associations and other farmers' organizations held at the University, are increasingly popular and useful occasions for disseminating the results of experimental work.

Publications during the year intended for farmer readers were the following:

**Bulletin:**

No. 9—Ropework for the Farm. 5th Edition (revised).

No. 33—Hotbeds, Coldframes and Small Greenhouses.

No. 34—Cattle Finishing in Alberta.

No. 35—Celery in Alberta.

**Circular:**

No. 9—Poultry Diseases in Alberta (revised).

**Leaflet:**

No. 11—Cultural Methods for Growing Sweet Clover in Alberta.

No. 19—Methods for Controlling Insect Pests in the Home.

No. 22—The Forest Tent Caterpillar.

### **Report of Acting Dean J. J. Ower of the Faculty of Medicine**

Herewith a short report of the activities within the faculty of Medicine, including the affiliated Schools of Pharmacy, Dentistry and Nursing, during the past session.

*Pharmacy.*

The Director of the School of Pharmacy reports another successful year. There were sixteen students, including one woman, proceeding to the degree and thirty-six, including six women proceeding to the diploma. As heretofore, lectures in Pharmacy were given by the members of the staff of the School of Pharmacy to all medical, dental and nursing students attending the University, in addition to those students registered in the school itself.

During the past year, as a result of the activities of a committee on the status of pharmacists in the army of which the Director of the School was chairman, recognition has been given to the professional standing of graduates in Pharmacy, with the result that there are now on service about thirty pharmacists holding ranks of Lieutenant and Major, as well as over two hundred non-commissioned and warrant officers.

There is a continual stream of requests for trained pharmacists from large pharmaceutical firms in the East, with the result that many of our graduates hold responsible positions in the laboratories of several well-known Canadian drug companies.

*Dentistry.*

The Director of the School of Dentistry also reports a successful session. There were fifty-two students in the courses in Dentistry, thirteen of whom are in the graduating class. During the month of March, an urgent call came from the D.G.D.S. for graduate dentists and later a request was made to the President that we arrange to advance the final examinations of those members of the graduating class who would agree to enlist in the C.D.C. immediately. This request was granted and seven final year students were given special examinations early in April.

## *Nursing.*

During the session 1940-41, there were eighty-nine students registered in the degree course in Nursing and fifty-nine in the diploma course. There are two students in the degree course who are completing their final year elsewhere—one at McGill University and the other at the University of British Columbia. The graduating class in the diploma course consists of eighteen students. The Director of the School of Nursing (Miss Agnes Macleod) is on leave of absence, serving with the nursing service of the C.A.S.F. overseas.

## *Medicine.*

During the past session there were two hundred and one students, of whom fifteen were women, registered in the five years of the medical course. In the graduating class, thirty-seven students, including three women, were recommended for the degree.

The medical course is in the process of changing over from a one year pre-medical and six years medical to a three year premedical and five years medical curriculum. The old first year has been discontinued and the last second year under the old curriculum will enter the University this autumn.

In common with other students of the University, the medical students, with the exceptions of the final year, have undergone the required military training.

In addition to those members of the faculty of Medicine already reported as being on active service, Dr. W. C. Mackenzie of the department of Surgery has entered the naval service.

The question of advancing the graduation of senior medical students to provide personnel for the military forces quickly was given due consideration and it was decided to advance the date of the commencement of the teaching of the final year to July 1st, 1941.

Scarcity of clinical material for teaching purposes in the University Hospital still continues to be the routine complaint of members of the clinical staff. Some progress has been made in increased utilization of facilities in the Royal Alexandra and Edmonton General hospitals, and it is hoped this may be further extended.

The annual refresher course for graduates held during Convocation week in the University Hospital was very successful.

## **Report of Dean R. S. L. Wilson of the Faculty of Applied Science**

The number of undergraduates in this faculty during the current session is, according to the information supplied by the Registrar, 315, which is 19 more than last year.

The distribution among years and departments is as follows:

First Year .....	130
Second Year .....	71
Third Year .....	61

Comprised of:

Chemical Engineering .....	15
Civil Engineering .....	16
Electrical Engineering .....	9
Engineering Physics .....	4
Mining Engineering .....	17

## Comprised of:

Chemical Engineering .....	17
Civil Engineering .....	6
Electrical Engineering .....	12
Engineering Physics .....	1
Mining Engineering .....	17

In September, 1939, the quota of admissions to first year engineering was raised from 80 to 120. This was done in view of the anticipated increase of demands for engineers for various services, including fighting and industrial, in connection with the war.

In June, 1940, a proposal was made by engineer members of the teaching staff here that all Canadian Engineering schools should be kept in operation throughout practically the whole of the calendar year instead of the usual yearly period of approximately seven months. This proposal was placed before the appropriate federal authorities as well as the other engineering schools. No action has resulted as yet although the Canadian Universities Conference agreed last February to press the matter with the Prime Minister.

In September, 1940, the admission quota to first year was again placed at 120. Space was found for the junior classes in drawing at the old Garneau School. Additional staff and equipment were provided in the departments of mathematics, physics, chemistry, civil engineering and mining engineering. A new double-shift arrangement for the survey school was tried and found very satisfactory.

In December, 1940, the University was visited by a British liaison officer on behalf of the Scientific Research staffs of Canada and Britain. We were persuaded to begin at once certain courses in radio engineering in the department of electrical engineering. These courses are part of the regular professional courses in electrical engineering and should not be confused with the Summer School courses on Electrical Methods of Fire Control to be given to recruits now being assembled at various centres.

The demand for engineers anticipated at the outbreak of the war has materialized. At the urgent request of the Civil Service Commission of Canada the Faculty Council agreed to release certain graduands and third year students for urgently required services before completing the formal examinations for their degrees and year standings. Each case was carefully considered by the department chiefly concerned so that there was no doubt of the student's likely success if he had taken the examinations. It is reported that a similar procedure was followed at certain other engineering schools.

During the session practically all male students were devoting six or more hours per week to military drill and military duties in addition to the regular academic work which was not reduced from previous standards. There were times when one suspected that academic results might suffer. At the end of the session, however, I feel that no claim can be sustained that any lower achievement resulted. The attitude of students as a whole towards the added military requirements is, in my opinion, entirely satisfactory.

The Engineering Students Society made an arrangement with the Medical Services Board whereby students wishing to enter certain occupations in mining and chemical engineering may obtain medical X-ray examinations in accordance with

the requirements of Workmen's Compensation Acts of other provinces. Certain industrial hazards to health are thereby obviated and disappointments avoided to a few students and graduates who might otherwise continue towards a profession for which they are not physically fitted. I record on behalf of my students their appreciation as well as my own of the Medical Director's and his associates' kind advice and co-operation in making the arrangements.

### **Report of Dean J. A. Weir of the Faculty of Law**

During the academic year just closing there were 59 students in full-time attendance in the faculty of Law at the University. Twenty-three were in the graduating year, and this full number was recommended to the Senate for the degree of Bachelor of Laws. Fifteen were in the second year and twenty-one in the first year.

The work done by the students in all years has been of good quality—slightly above the average, if anything. Notwithstanding the effect of compulsory military training which was superimposed on the normal work of the year, it has been found that the strictly academic work has not suffered. Many students in this faculty have taken a very active and responsible part in the work of the C.O.T.C. and of the Auxiliary Battalion. These students, though under considerable strain, have given a good account of themselves in their purely academic work. No problem of discipline of any kind has arisen in this faculty out of the requirement of compulsory military training.

Our relations with the Law Society and with the Education Committee of the Benchers continue, as always, very close and cordial. Frequent meetings are held with the Education Committee at which education matters of common interest are discussed and various problems actually arising are dealt with.

No change in staff has been made during the year.

It is interesting to note that two-thirds of last year's graduating class are in the Armed Services and that many members of this year's class have already enlisted. No problem of employment of graduates, consequently, exists.

### **Report of Principal M. E. LaZerte of the College of Education**

Before commenting upon details of the year's work, I wish to say that we were very pleased to welcome Dr. Kenneth F. Argue as a member of the staff at the beginning of the year. Dr. Argue's work is increasing very noticeably the effectiveness of the teacher-training and graduate courses.

The enrolments in the College of Education have been increasing rather rapidly. There were forty-seven students in the teacher-training course during the session. The total number of registrations, including partials, was fifty-one. Thirty-five of these students were graduates registered in courses leading to the Senior Diploma of the College of Education, twelve were undergraduates taking courses leading to the Junior Diploma of the College of Education.

The number of extra-mural students in the graduate school whose work was directly supervised by the College of Education was fifty-three. There were one hundred registrations in education courses in the 1940 summer session.

The Senate accepted the recommendations from both the College of Education and the School of Graduate Studies that the administration of the Bachelor of Education courses would in future be the responsibility of the College of Education.



Many teachers, particularly those in the departments of mathematics and science, have enlisted with the armed forces, creating as a result vacancies in high school staffs of the Province.

**Report of Dean G. M. Smith, Chairman of the School of Graduate Studies**

1. During the academic year 1940-41, 107 students were registered in the School of Graduate Studies in candidature for higher degrees.

The distribution of graduate students, according to degrees sought, was as follows:

<i>Degree</i>	<i>Men.</i>	<i>Women.</i>	<i>Total.</i>
Master of Arts .....	17	5	22
Master of Science .....	20	1	21
Master of Science (Agriculture) .....	11	.....	11
Bachelor of Education .....	28	5	33
M.A. in Education .....	12	1	13
M. Education .....	7	.....	7
	—	—	—
	95	12	107

In addition, 15 graduates who are not candidates for any higher degree were registered in the School as special graduate students.

The distribution of candidates for higher degrees according to departments was as follows:

Animal Husbandry .....	2
Biochemistry .....	7
Chemistry .....	6
Education .....	53
English .....	6
Entomology .....	1
Field Crops .....	3
Geology .....	6
History .....	5
Horticulture .....	2
Modern Languages .....	4
Philosophy .....	5
Political Economy .....	2
Soils .....	4
Zoology .....	1
	—
	107

2. Concurrently with the Council of the College of Education, the School of Graduate Studies recommended to the Senate that the administration of the Bachelor of Education degree, established at the meeting of the Senate of December, 1939, be transferred to the Council of the College of Education. The Senate approved this recommendation at the meeting in May, 1941:

3. The University of Alberta Research Scholarships for 1940-41 were awarded to Miss Elizabeth Mary Frost, Department of Philosophy and Psychology, and to James George Ross, Department of Field Crops.

4. Through the generosity of the Philosophical Society, the School has again been able to award in 1941 a scholarship of the value of \$100 to a deserving student



with an exceptionally good record who, having completed work for the M.A. or M.Sc. degree in the spring of 1941, is proceeding in the autumn to another university for further study. The scholarship in 1941 was awarded to Walter Lewis Dunkley, department of Biochemistry, by reversion from Miss Edith Alice Fleming. Mr. Dunkley is now pursuing advanced work at the University of Wisconsin.

### Report of the Provost

#### 1—*Students' Union.*

The session, as might be expected on account of unsettling conditions and problems as to the future, presented many difficulties in student government. Compulsory military training made heavy demands upon students' time and energy and interfered not only with their studies but with those activities from which they generally derive considerable recreation and other important benefits. I am glad to say, however, that they accepted their new tasks loyally and for the most part cheerfully. I have no hesitation in saying also that the military training has exerted a very beneficial influence upon student deportment generally. In spite of certain difficulties encountered at the beginning of the session, the Students' Council conducted the affairs of the Union in a very satisfactory manner. The final financial statement shows a credit balance of \$2,500, of which \$2,000 has been invested in war bonds. There is also at the present time a sum of \$26,000 held in trust for a Students' Union Building.

Special contributions were made during the session to the Red Cross, the Spitfire Fund, the War Contact Fund, the War Workers Fund—the latter two of which provide various comforts for members of the faculty, graduates and undergraduates now on active service. Contributions were also made to the International Students' Service, the Greek Relief Fund, and to the Christmas Fund which is used for distributing certain supplies to needy families throughout the Province.

#### 2—*Athletics.*

Much discontent was caused by the action of the Universities' Conference in cancelling all inter-university competitions for the year. As a result, however, of an appeal for reconsideration of this policy, the western universities were granted freedom to continue these competitions. Alberta and Saskatchewan competed in Rugby, Basketball, Boxing, Wrestling and Fencing.

The reorganization of the Big Block Club and the institution of "Colour Night" have as their aim the setting up of higher standards of sportsmanship and athletic attainment.

#### 3—*Literary Society.*

The outstanding achievement of the Literary Society was the production by the Philharmonic Society of Gilbert and Sullivan's "Mikado" which played before four crowded houses in Convocation Hall and before two large audiences in Calgary. It is to be regretted that there has been a falling off of interest in the activities of the Debating Club, the Political Science Club and the Public Speaking Club, due, no doubt, to some extent to the added work in connection with military training.

#### 4—*The Gateway.*

For some years the conduct of "The Gateway", the students' paper, has been deemed unsatisfactory by both faculty and students. During the past session, a committee, appointed by the Committee on Student Affairs under the chairman-

ship of Dean Newton, made a very careful study of this problem and presented an excellent report which it is hoped will result in raising "The Gateway" to the desired level and make it more truly representative of the best life of the student body.

#### 5—*Medical Services.*

The Medical Services have been conducted with great efficiency. In spite of a long epidemic of Rubella involving the treatment of about fifty cases and a larger number than usual of emergency operations, the financial statement shows a balance of about \$150.00.

#### 6—*Discipline.*

The most serious cases of discipline involved the cancelling of the annual student dinner of one of the faculties and the annual student dance of another faculty on account of misconduct, and the confirmation by the University of the disciplinary action exercised by two fraternities in connection with the misconduct of certain of their members. All other cases were of a minor nature.

#### 7—*Social Functions.*

The number and character of social functions in the University is determined by the Committee on Student Affairs which is a Senate Committee. The supervision of these functions is the responsibility of the Provost. On account of a great deal of criticism of the number and cost of the social functions at the present time and the failure of the students themselves to respond to the request to take action in the matter, it would seem proper that the Senate, which represents the public as well as all interests in the University, should consider the advisability of issuing instructions to the Committee on Student Affairs to take the necessary steps to regulate further the number, character and cost of these functions.

### **Report of the University Library by the Librarian, Mr. D. E. Cameron**

During the past year, the work of the Library has proceeded along the accustomed lines, with adjustments, large and small, required by the conditions of the day.

There has been no change in the staff during the year. Miss Hamilton has been awarded an American Library Association Fellowship of \$1,300 for advanced study at the University of Michigan, and has been granted leave of absence for this purpose.

As many students were prevented by military parades from using the Library at their usual hours, special hours were arranged to accommodate them; the Medical Library, for example, was opened at 7:30 a.m. Seating space has been very fully used during the year, and, as ever, the problem of space for books and readers taxes our ingenuity to the full.

The reduced postal rate on books circulated from the Library has been found of great advantage, a notable increase having taken place in the books borrowed by physicians from the Medical Library by mail, the cost previously of mailing heavy medical books having been severely restrictive.

A further advance in library service has been the development of microfilm reproduction of books and articles, which can now be obtained in microfilm from most of the larger libraries, the cost of an article being in most cases far under the previous postal charges alone. The Library has acquired a projector for reading

microfilm, and appearances are that this service will be greatly extended, and will prove a great economy in library work.

For the first year of the war a few numbers only of German periodicals were received, but now no journal arrives from any German-occupied country, the only surviving journal from continental Europe being one from Sweden. Books bought in the United States suffer from a price enhanced by approximately 25%, and books from Great Britain are greatly delayed in delivery. We are, however, able to maintain our connection to a remarkable degree, and the London book trade is making heroic efforts to meet the emergency. Long delays occur and correspondence has often to be duplicated, but, so far, no single book coming to us from London has to our knowledge been lost at sea; one only returned by us to London is reported as damaged by sea water, and useless.

Delay in delivery has been at times inconvenient, and at present London orders dating early January are just coming in, but continuity of service has still been maintained, in spite of the loss of all their records by our London agents, Messrs. Simpkin Marshall.

During the year, we have received great advantage from a recently organized exchange of medical books and journals, many items of use to us having been received from larger libraries in exchange for such of our duplicates as we can spare. The cordial relationships with other libraries has been maintained, and the many courtesies extended to us by larger libraries are gratefully recorded.

The building up of the Woods Collection, made possible by the generous gifts of Colonel J. H. Woods and a friend, has been given care. This library of books designed to extend our knowledge of the life and work of the United States and so build up a more sound understanding of, and sympathy with, our neighbors, is now about half completed, and is being carefully added to as suitable material is found. Very considerable use has been already made of this valuable addition to our resources, which has greatly strengthened the Library in an important field.

During the year a fairly large collection of Dominion Government publications was added by gift from other libraries; these in the meantime have to be stored, but will in time be of great use, and are therefore accepted, although at present they cannot be made readily available for use. Many other gifts of books and periodicals have been received also and all have been suitably acknowledged.

The accession number now stands at 72,358, an increase during the year of 2,466 bound volumes.

Binding and other routine duties have been regularly maintained during the year.

The College of Physicians and Surgeons of Alberta again gave a generous grant of \$200 for the purchase of medical books.

### **Report of the Director of the Department of Extension, Mr. Donald Cameron**

#### *Statistical Survey.*

Number of lectures, general .....	131	
Aggregate attendance .....		9,249
<i>Radio.</i>		
Radio lectures, General and Agricultural .....	361	
Total number studio programmes .....	105	

Total number Remote Control programmes .....	15
Total number school broadcasts .....	75
Total number Symphony hours .....	163
Total number plays .....	2
Total number hours broadcasting .....	1,176

#### *Library and Debating Service.*

Number of Regular Libraries circulated .....	90
Number of Special Libraries circulated .....	79
Travelling Library circulation:	
Regular .....	21,287
Special .....	49,059
	<hr/>
	70,346
Open Shelf circulation:	
Books .....	19,340
Pamphlets and clippings .....	1,471
Periodicals .....	1,358
	<hr/>
	22,169
Books and magazines sent to Alberta School of Community Life .....	200
Books and magazines sent to Banff School of Fine Arts .....	421
Communities supplied with single plays (adult, juvenile) .....	326
Number of adult single plays sent out .....	1,315
Number of juvenile single plays sent out .....	139
Number of juvenile collections .....	358
Number of adult collections .....	745
	<hr/>
	2,557
Number of package libraries for debaters .....	352
Each set used by 4 people .....	1,408

#### *Visual Instruction.*

Number of times lantern loaned .....	55
Sets of lantern slides circulated .....	675
Number of times used .....	447
Aggregate attendance lantern lectures .....	54,172
Sets of film-slides circulated .....	1,009
Number of times used .....	2,045
Aggregate attendance .....	64,213
Sets of moving picture films circulated .....	1,542
Number of reels in sets .....	5,823
Number of showings .....	2,987
Aggregate attendance at moving picture programmes .....	341,327

#### *Conferences.*

University Week for Farm Young People:	
Delegates .....	110
Leaders .....	6
	<hr/>
	116
Refresher Course in Municipal Administration .....	70
Land Inspectors' Short Course .....	100

### *Study Groups.*

Number of sets sent out to groups in		
Alberta .....	279	
Saskatchewan .....	3	
Manitoba .....	11	
British Columbia .....	2	
Total .....	295	
Estimated attendance at study groups in Alberta .....		1,500
Number of students in W.E.A. Study classes in Edmonton .....		40
Calgary nil.		

### *Youth Training Programme.*

Number of schools .....	22	
Number of staff members .....	26	
Total attendance at schools .....		1,287

### *Publications.*

#### *Press Bulletins:*

Number of issues .....	1	
Circulation .....		5,500

#### *Agricultural Publications:*

Number sent out during the year .....		26,079
Number of individual requests received .....	3,000	
Total number of bulletins distributed since inception of service	323,203	

### *Arts.*

#### *Enrolment at Banff School of Fine Arts (Edmonton and Banff):*

Banff .....	175	
Edmonton .....	55	
	—	230

Enrolment at Art Schools, Vegreville and Lethbridge ..... 27

Adjudications: Smoky Lake, Alix, Edmonton, etc., attendance ..... 2,000

#### *Alberta School of Community Life.*

Attendance ..... 91

#### *Lake Saskatoon Conference.*

Attendance: Regular .....	52	
Evenings .....	200	200

#### *Canadian Legion War Services.*

Registrations ..... 974

### *Recapitulation.*

Total aggregate attendance at lectures, lanternslide lectures, moving picture programmes, Farm Young People's Week, Study Groups, Banff School of Fine Arts, Art Schools at Vegreville and Lethbridge, Alberta School of Community Life, Youth Training Schools, Refresher Course in Municipal Administration, Land Inspectors' Course, Adjudications, Lake Saskatoon Conference, Canadian Legion War Services ..... 475,596

Total circulation of books, travelling libraries, package libraries, plays, periodicals .....	96,480
Total circulation of Press Bulletin and Agricultural publications .....	31,579

NOTE: The statistics do not mean separate individuals, as a great many people receive more than one service from the Department.

### Conclusion.

This report covers the twenty-eighth year of service by the Department of Extension. To anyone who takes the time to examine the manifold activities of the Department, it must be apparent that through its Department of Extension the University of Alberta is making a valuable contribution to the life of this province. There is no corner of the province too remote and no group of people too small to be reached in one way or another by the University, thus it becomes in a very real sense a University of the people, serving them, guiding them, and establishing that community of interests and sympathy which must exist between an institution of higher learning and its constituency if the greatest values of democratic life are to be preserved.

### Report of the Acting Director of the Provincial Laboratory, Dr. J. J. Ower—January, 1940, to December, 1940

I have the honour to submit the following report of the work carried out in the Provincial Laboratory for the year 1940. The number of routine public health laboratory examinations, as will be noted in the accompanying tables, is still increasing, the total being some 4,500 higher than in 1939.

As noted in previous reports the total of strictly public health examinations has been increasing so much from year to year that it was finally found impossible to carry on the large number of animal pathological examinations requested. The establishment of a modern special veterinary pathological laboratory by the Department of Agriculture has transferred the load of this work from this laboratory. Chicken bloods, fox vaccines and other veterinary examinations have been discontinued. Routine cattle bloods continue for the present to be done in the laboratory.

In spite of this relief, the natural increase in the routine work, plus the added demand for large numbers of special examinations for soldiers has now completely overtaxed the physical capacity of the space, equipment and personnel.

In conclusion, may I state that the staff have shown great loyalty and diligence and a willingness to accept, without complaint, the considerable amount of unrewarded overtime necessary to complete the work day by day.

The accompanying table covers some of the detail of the year's work:

#### Commercial Value of Work if Minimum Charge Were Made, 1940

Sputum .....	632	\$ 1.00	\$ 632.00
Diphtheria .....	2,149	1.00	2,149.00
Typhoid Fever .....	471	1.00	471.00
Milks .....	1,172	3.00	3,516.00
Waters .....	2,414	10.00	24,140.00
Miscellaneous Examinations .....	3,722	3.00	11,166.00
Mothers' Milks .....		2.00	
Urinalysis .....	85	3.00	255.00
Medico-Legal Examinations .....	5	5.00	25.00



Bloods for Wassermann Test .....	33,140	3.50	115,990.00
Smears for the Gonococcus .....	5,966	1.00	5,966.00
Van Der Bergh Determination .....	2,295	1.00	2,295.00
Pathological Histological Material .....	9,360	5.00	46,800.00
Blood Smear Examinations .....	117	2.00	234.00
Ascheim Zondek Test .....	200	5.00	1,000.00
Cerebro-Spinal Fluid Examinations .....	2,031	2.00	4,062.00
Port-mortem Examinations (Bact.) .....	99	5.00	495.00
B. Abortus Examinations .....	466	1.00	466.00
B. Tularensis .....	465	1.00	465.00
Typhoid Vaccine (10 c.c. quantity) .....	1,059	.25	264.75
Autogenous Vaccine (25 c.c. quantity) .....	475	5.00	2,375.00
Stock Vaccine (25 c.c. quantity) .....	500	5.00	2,500.00
Poliomyelitis Serum (20 c.c. quantity) .....	24	2.50	60.00
<hr/>			
Total.....			\$225,326.75
Cattle Blood Examinations .....	1,161	.10	116.10
<hr/>			
Total.....			\$225,442.85

### Report of the Director of the Industrial Laboratories and Provincial Analyst, Mr. James A. Kelso

In all, 3,704 examinations and analyses of various substances were carried out during the year.

Besides analyses and examinations court evidence and consultations were necessary in cases covering Alberta and Dominion Acts. Much time was spent on investigations re criminal cases for the R.C.M.P. Various government departments were assisted with examinations, etc., such as surveys of the Department of Trade and Industry, Alberta Liquor Control Board, Department of Provincial Secretary, Department of Lands and Mines. Special problems coming up during the year included detailed work on colouring of gasoline under Fuel Tax Act, this being done with inspectors of the Department of Provincial Secretary and also inspectors from Saskatchewan.

The usual assistance was given to prospectors and companies in the province and analyses made for departments of the University and control work handled for the University Power Plant.

Materials of construction were handled in conjunction with departments of Civil and Electrical Engineering.



REPORT  
OF THE  
BOARD OF GOVERNORS  
AND  
THE PRESIDENT  
OF THE  
UNIVERSITY OF ALBERTA  
1941-42

LIBRARY OF THE UNIVERSITY  
OF ALBERTA

*To the Lieutenant Governor in Council.*

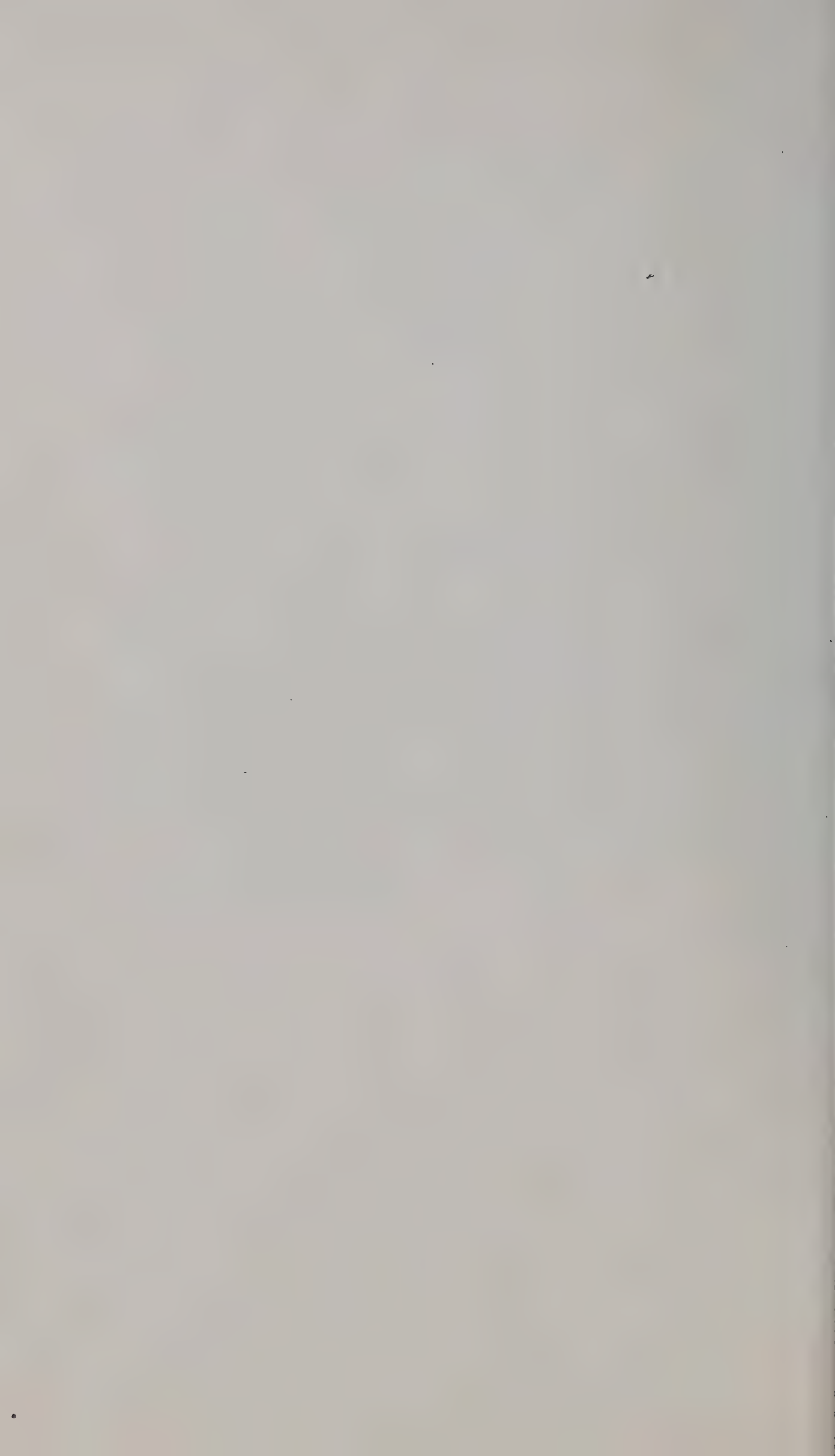
SIR:

On behalf of the Board of Governors of the University of Alberta, and in accordance with section 28, subsection 2, of an Act respecting the University of Alberta, the undersigned have the honour to transmit through the Minister of Education the Report of the University of Alberta, setting forth the receipts and expenditures for the year ending March 31st, 1942, and the investments as they stood at the end of the fiscal year.

Appended to the Report is the Report of the President of the University, in which the academic work of the University for the year, July 1st, 1941, to June 30th, 1942, is dealt with in detail.

H. H. PARLEE, *Chairman.*

R. NEWTON, *President.*



# Financial Statement

UNIVERSITY OF ALBERTA

BALANCE SHEET AS AT MARCH 31, 1942

## ASSETS

### FIXED:

Buildings and equipment in service:		
Land, buildings and plant .....	\$3,825,882.12	
Furnishings and equipment .....	875,169.87	
		<u>\$4,701,051.99</u>

### CURRENT:

Cash on hand and in transit .....	\$	3,320.67	
Cash in Treasury Branch .....		415.58	
Accounts receivable:			
Sundry debtors .....	\$	49,966.87	
Less: Reserve for uncollectible accounts .....		2,000.00	
		47,966.87	
Interest accrued .....		1,562.50	
Inventories and supplies:			
Merchandise held for re-sale .....	\$	27,357.82	
Supplies .....		12,591.40	
		39,949.22	
			<u>93,214.84</u>

### OTHER ASSETS:

Livestock on hand .....	\$	28,770.50	
Deposit: Workmen's Compensation Board .....		4,738.05	
			<u>33,508.55</u>

### PREPAYMENTS:

Insurance unexpired .....	\$	3,840.90	
Sundry .....		205.68	
			<u>4,046.58</u>

### DEFERRED CHARGES AND CAPITAL LOSSES:

Bond discount and expenses .....	\$	202,865.73	
Plant and equipment replaced or abandoned .....		28,194.50	
			<u>\$ 231,060.23</u>

### TRUST:

	Par Value	Book Value
Investments:		
Dominion of Canada debentures ....	\$ 9,000.00	\$ 9,136.33
Province of Alberta debentures .....	660,600.00	652,936.61
Province of Alberta debentures, past due .....	13,200.00	13,197.50
Province of Alberta guaranteed de- bentures .....	7,000.00	7,000.00
Province of Alberta savings certi- ficates .....	650.00	650.00
Province of Alberta savings certi- ficates, past due .....	10,000.00	10,000.00
Other debentures and shares .....	12,246.66	12,246.66
	<u>\$712,696.66</u>	<u>\$ 705,167.10</u>

Cash on hand and in transit .....	564.20
Cash in bank .....	143,450.31
Loans receivable .....	2,561.30
Mortgages receivable .....	33,345.87
Real estate and shares, nominal value .....	18.00
	<u>885,106.78</u>
	<u><u>\$5,947,988.97</u></u>



# LIABILITIES

## CAPITAL AND SURPLUS:

Advances from Province of Alberta .....	\$4,776,373.30	
Capital surplus arising from:		
Equipment donated .....	\$ 16,692.63	
Sundry bequests and income contri-		
butions to capital .....	4,644.50	
Income contributions to library .....	133,549.20	
	<u>\$154,886.33</u>	
Deduct: Revenue deficit as per State-		
ment No. 75 .....	28,854.73	
		<u>126,031.60</u>
		\$4,902,404.90

## CURRENT:

Bank overdraft .....	\$ 62,041.34	
Bank loan .....	30,000.00	
Accounts payable .....	<u>34,203.07</u>	
		126,244.41

## DEFERRED INCOME:

Sundry .....		395.00
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## RESERVES:

Premium on Rockefeller grant .....	\$ 18,221.66	
Unexpended library fees and donations .....	10,357.67	
Workmen's Compensation Board .....	<u>5,258.55</u>	
		33,837.88

## TRUST:

Rockefeller Foundation .....	\$ 500,000.00	
Escheated Estates .....	169,524.40	
*Carnegie grant in aid of pension fund .....	49,923.19	
Sundry endowments, bequests and scholarship		
grants, and amounts administered or held for		
affiliated organizations and others .....	<u>165,659.19</u>	
		885,106.78
		<u>\$5,947,988.97</u>
		=====

\*Contingent liability of \$1,500.00 Re Note receivable discounted.

Edmonton, Alberta, August 13, 1942.

I have audited the books of account of the University of Alberta for the year 1942, and the above Balance Sheet and accompanying Statement of Revenue and Expenditure are in accordance therewith.

Land, buildings, plant, furnishings and equipment are shown at original cost without provision for depreciation. Buildings in process of construction from funds provided by the Dominion Government are not included in the above Balance Sheet. University officials are of the opinion that the value of furnishings and equipment has been maintained by additions and renewals from revenue.

Trust investments include Province of Alberta past due debentures and savings certificates of a par value of \$23,200.00. Interest on Province of Alberta direct and guaranteed issues was accepted during the year ended March 31, 1942, at reduced rates as set forth in Chapter 11, Statutes of Alberta, 1936 (Second Session).

Principal repayments on mortgages receivable were in arrears \$6,127.87 as at March 31, 1942.

Subject to the foregoing remarks, I certify that, in my opinion, the above Balance Sheet is properly drawn up so as to show the financial position of the University of Alberta as at March 31, 1942, and the accompanying Statement of Revenue and Expenditure correctly sets forth the result of operations for the year ended at that date.

C. K. HUCKVALE, C.A.,

Acting Provincial Auditor.

UNIVERSITY OF ALBERTA  
STATEMENT OF REVENUE AND EXPENDITURE  
FOR THE YEAR ENDED MARCH 31, 1942

REVENUE

Province of Alberta:			
Grant .....	\$	450,000.00	
Debt charges .....		132,983.77	
			\$ 582,983.77
Rockefeller Foundation .....			12,500.00
General, summer school and examination fees .....			245,049.55
Library fees .....			8,725.55
Administration charges recovered .....			1,998.00
Rental, civil engineering instruments .....			1,900.00
Operating departments' net revenue:			
	Revenue	Expenditure	
Rentals .....	\$ 29,679.66	\$ 11,879.28	17,800.38
Dining Room .....	111,277.41	101,287.20	9,990.21
Bookstore and post office .....	46,236.76	43,488.07	2,748.69
Printing Department .....	28,462.09	21,096.74	7,365.35
	<u>\$215,655.92</u>	<u>\$ 177,751.29</u>	
			<u>\$ 889,261.50</u>

EXPENDITURE

Salaries:			
Total salaries and wages .....	\$	703,818.44	
Less: Charged to departments .....		329,862.55	
			\$ 373,955.89
Debt charges .....			132,983.77
Operating departments' net expenditure:			
	Expenditure	Revenue	
Department of Agriculture .....	\$128,758.90	\$ 32,993.63	95,765.27
Provincial and industrial laboratories ..	55,884.66	10,376.20	45,508.46
Department of Extension .....	52,261.34	23,742.87	28,518.47
Power plant .....	55,611.09	38,614.08	16,997.01
Department of Dentistry .....	16,862.80	3,191.29	13,671.51
Department of Biochemistry .....	12,158.74	2,674.00	9,484.74
Department of Pharmacy .....	10,038.84	690.69	9,348.15
Works department .....	43,922.68	42,669.22	1,253.46
	<u>\$375,499.05</u>	<u>\$ 154,951.98</u>	

Maintenance and repairs .....	48,661.58
Pensions .....	22,484.99
Instruction laboratories .....	18,758.13
Special clinical services .....	17,500.00
Research Council .....	11,505.85
School of Education .....	13,401.01
Provision for library extension .....	8,725.55
Summer school .....	9,719.57
Calendars, press bulletins, etc. ....	3,101.48
Rent .....	1,843.11
Printing and stationery .....	2,249.38
Telephone and telegrams .....	2,308.94
Library .....	2,447.21
Insurance .....	2,430.72
Travelling expenses .....	1,903.25
Postage and excise .....	711.14
Upkeep of cars .....	959.84
Inspection and repairs of office machines ..	578.89
Bank interest .....	495.61
Scholarships and medals .....	441.62
Provost .....	369.00
Physical Education .....	144.52
Sundry .....	2,335.12
	<u>\$ 900,563.24</u>

Excess of expenditure over revenue for the year ended March 31, 1942 .....	\$ 11,301.74
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# DEFICIT ACCOUNT

AS AT MARCH 31, 1942

Deficit at March 31, 1941 .....	\$ 18,782.54
Deduct:	
Sundry adjustments of previous years' transactions, net .....	1,229.55
	<hr/>
Add:	\$ 17,552.99
Excess of expenditure over revenue for the year ended March 31, 1942 .....	11,301.74
	<hr/>
Deficit at March 31, 1942 .....	\$ 28,854.73
	<hr/> <hr/>

APPENDIX

THE REPORT OF THE PRESIDENT

*To the Board of Governors  
of the University of Alberta.*

GENTLEMEN:

I have the honour to submit the following report on the work of the University of Alberta for the year ending June 30, 1942.

ROBERT NEWTON,  
*President.*



# The Report of the President

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The University's part in the war, and the survey of the affairs of the University by a special committee, are the two outstanding features of the year's activities.

## The University and the War

The impact of the war on the life and work of the University grows more pronounced as time goes on. During the first Great War, student registration dropped from a high of 439 in 1914-15 to a low of 305 in 1916-17, or about 30% in two years. During the present war the trend has again been downhill. Starting from the peak of 2,327 in 1939-40, the figure dropped to 2,268 in 1940-41, and to 2,045 in 1941-42, or a little more than 12% in the two years. On a percentage basis registration has been better maintained this time, owing in part no doubt to the declared policy of the Dominion Government that the flow of technically trained workers from the Universities to the armed forces and to war industries should be fully maintained, or if possible increased. In support of this policy the Dominion-Provincial fund available for grants to needy students has from the beginning of the fiscal year at April 1, 1942, been increased from \$4,000 to \$20,000. Concurrently, the Department of National Defence has made it possible for students in the two final years of Medicine and Dentistry to enlist and secure leave of absence to complete their studies, with pay of \$1.30 per day and, except for internes, subsistence allowance of \$1.00 per day.

I should at this point acknowledge gratefully special grants from the Kellogg Foundation, Battle Creek, Michigan, of \$10,000, for grants and loans at low interest rates to students in accelerated courses in Medicine, and \$5,000 for corresponding aid to students in Dentistry.

With help available from various sources as indicated, there seems no reason why any capable student, who is willing to use his professional training in support of the country's war effort, should drop out of his University course for lack of finances.

Nevertheless, the rate of both student and staff enlistments in recent months has accelerated to such an extent as to cause serious concern respecting the future supply of technically trained men and women. A conference of University and Government representatives, called by the Department of National War Services at Ottawa in May, 1942, disclosed a prospective requirement of some 4,000 engineers and science workers in this country during the next twelve months, as compared with a normal annual output of about 800 from the universities. The importance of ensuring that all top ranking matriculants from the high schools proceed with further studies, at least up to the full capacity of the universities to accommodate them, was stressed by the representatives of the Government Departments. It was further agreed that the armed services should cease direct recruiting in the universities, and that the Director of National Selective Service should be the sole authority to guide undergraduates destined either for the armed forces or for war



industries, the orientation of such students to begin as early in their course as possible.

The Conference agreed that some military training was desirable for all men students, but questioned whether more than two years in the Auxiliary Battalion was profitable for students headed for industry. In view of the fact that students enrolled in the C.O.T.C. are committed to join the armed forces, and that moreover a quota has had to be established on commissions available to graduates of the C.O.T.C., it was felt that the C.O.T.C. would in future become a rather small, select body, and the bulk of the students get their training in the Auxiliary Battalion.

Obviously the Universities must retain adequate staff, to be able to train the large number of students desired. In the first two years of the war it was usually possible to replace temporarily such staff members as enlisted. Now it is becoming virtually impossible to do so. The Conference recognized this, and agreed that staff changes should in future be subject to review by the Director of National Selective Service.

The apparent impossibility of turning out fully trained graduates in the numbers mentioned above, led to further consideration of the value of short courses planned especially to equip men for war jobs. It was thought that courses of one to two years' continuous, intensive work would meet the requirements for perhaps half the technical men needed. Some delegates urged that the Government make fuller use of the Universities as technical training centres, instancing the courses for radio mechanics and naval artisans as examples of what might be done.

It may be mentioned here that the University of Alberta is now conducting its second course for radio mechanics. There were 125 students in the first 14-week course, and there are 60 in the present course of 16 weeks. Lately we have begun a 14-week course for 100 naval electrical artisans. If these numbers were added to our regular University registration of 2,045 for the current year, the total figure would almost exactly equal the peak registration of two years ago. This is one indication of how the University is being transformed to a wartime basis.

Other evidence of this transformation is found in the extent to which service training has been successfully combined with academic work, for practically all students, both men and women. The women students took their service training voluntarily during the past year, but they themselves have asked that it be made compulsory to the extent of 40 hours next year, believing that this will simplify administration.

The acceleration of courses in Medicine, Dentistry, and Education, is another direct contribution to the war effort. We hope to get from the Dominion Government, in addition to its share of the grants to students already referred to, a grant to cover part of our out-of-pocket expenses in maintaining instructional work in Medicine and Dentistry practically all the year round. So far we have no prospect of help to the University (as distinct from the students) for the accelerated course in the Faculty of Education which begins May 20. It is not sufficiently realized to what extent the teaching profession has become a war casualty. We cannot afford to close our schools, even in wartime, and must make a supreme effort to train more teachers.

Along the same line, I am happy to report that the recent Ottawa conference recognized that even under the stress of war we cannot afford to neglect entirely

those subjects classified as the humanities in our University teaching. The war is as much a battle of spirit and morale as of arms and strategy, and the spirit of man cannot live without its proper nutriment. It was suggested that at least a limited number of men students who have shown special aptitude in such subjects as history and literature should be encouraged to follow these studies to graduation. The Rockefeller Foundation has shown its faith in the fundamental value of the Fine Arts by giving us lately a grant of \$4,000 to encourage instruction in drama, and the Carnegie Corporation of New York has just given us a further grant of \$2,500 in aid of our Banff School of Fine Arts.

During the past year there has been an encouraging increase in opportunity for the research laboratories of the University to contribute to the war effort. Probably not less than half the total capacity of these laboratories is now being used for research on war projects. The Provincial Government built on the University Campus a small laboratory especially devoted to the testing of aviation gasoline used throughout the whole of western Canada.

The adjustment to the loss of the three University residence buildings, which were turned over to the Air Force a year ago, was, thanks to the loyalty of the students and the hospitality of the people of Edmonton, made smoothly and satisfactorily. With funds provided by the Dominion Government, a temporary infirmary has been built, and temporary gymnasium facilities have been incorporated in the former University rink, now the C.O.T.C. Drill Hall.

Finally, with respect to the contributions of the University to the war, I must report with pride the large number of students, graduates, and staff who are serving in the active forces. Our figures are necessarily incomplete, as many graduates, especially the older ones, have not kept close touch with us. Moreover, a number of enlistments from this year's C.O.T.C. are just now pending. Enlistments of which we have definite record so far (May 18, 1942) are:

Graduates (including class of 1942) .....	503
Undergraduates .....	232
Women .....	19
Staff .....	27
	<hr/>
	781

### The University Survey

In August, 1941, a special committee was set up by the Provincial Government to survey the affairs of the University. This Committee made an interim report at the end of January, when the last session of the Legislature opened, and certain of its recommendations were made the basis for a Bill to amend and consolidate the University Act. Other recommendations were within the powers of the University governing bodies to implement, notably the raising of the College of Education to the status of a Faculty. Still other recommendations can only be carried out with the help of the Government, which must provide the necessary funds; these are still matters for negotiation.

Overcrowding of classrooms and laboratories was found to be serious, resulting from lack of additions to the physical plant for twenty years during which the student population practically doubled, and the Committee recommended a building programme spread over ten years. It also urged adherence to the salary schedule set up twelve years ago, in order to protect the morale of the staff and make it possible to hold the good young men.

The Committee pointed out the need for unification of the teacher-training system within the Province, also for better integration of the high school and University programmes. Steps have already been taken to harmonize the entrance requirements to Normal Schools and the Faculty of Education, and to facilitate transition from one to the other as progressive stages in pedagogical training. It is also proposed that, beginning with the autumn of 1943, entrance to the Faculty of Arts and Science will be on a broader basis designed to permit students to make more use of the wide range of courses now available in many high schools.

The year-round operation of some faculties and schools, now introduced as a war measure, will probably have to be extended to the whole University during the post-war rehabilitation period, when many returned students will be supported by the Dominion Government during the completion of their training. The Committee recommended a study of the feasibility of making this continuous operation a permanent system, thus to make fuller use of the existing plant and also to make university attendance possible for more people.

Further with a view to serving more people educationally, the Committee recommended exploring the feasibility of establishing more junior colleges, and urged the importance of making more scholarships available to able students who lacked the means to pursue University work. The Committee also gave hearty assent to the many submissions recommending intensification of the University's extension work throughout the Province.

In this brief notice of the Committee's report it is not possible to cover all its recommendations. However, the new University Act, one of the first fruits, deserves special consideration. In the main it follows closely the provisions of the old Act. The chief differences relate to the powers of the various governing bodies.

Here should be noted a guiding principle which the Committee adopted, namely, that the powers and duties assigned to each governing body should concern matters with which its members are familiar. Thus it was felt that the recommending to Convocation of degrees for course work, and various other academic duties now discharged by the Senate, might better be done by the General Faculty Council, whose members have first-hand knowledge of the matters to be decided. Again it was thought that the representatives of the professional societies, who now sit with the Senate, might better be distributed among the appropriate faculty councils which actually plan and shape the course of training taken by students who later become candidates for membership in the professional societies. The interests of the societies should thus be more fully served and the University should benefit by the experience and advice of the professional representatives, introduced at a time and place where full consideration is possible.

On the other hand, the Committee felt that the Senate should play a more important part in the activities of the University than it can do as at present constituted, and that it should act as a bridge between the University and the life and activities of the Province. For that reason the Committee recommended that the members of the Senate should include representatives of agriculture, business, labour, industry, public education, and organizations devoted to social and cultural welfare, as well as of the Board of Governors, affiliated colleges, staff, students, and alumni. The new Senate will have power to hear submissions from any person or body interested in the University, to inquire into any matters pertaining to the University, and to make recommendations thereon to appropriate bodies.

It is hoped that the inclusion of alumni representation on both the Board of Governors and the Senate, the proposed appointment of a full-time alumni secretary, and other measures recommended by the Survey Committee, may have the effect of binding the alumni more closely into the structure and life of the University. They should be an integral part of its organization, and a source of great strength.

### Changes in Administration

The decease of Dr. the Honorable A. C. Rutherford was followed by the election of the Honorable Mr. Justice Frank Ford to the Chancellorship. The retirement of Dr. W. A. R. Kerr from the Presidency led to my appointment to that office. The long and distinguished services of Chancellor Rutherford and President Kerr have been recognized and recorded in suitable places. I desire, however, to pay my personal tribute to two fine gentlemen whom I have had the privilege to count among my friends and colleagues of long standing. One of them fortunately I may still enjoy and take counsel with.

The death of Dr. L. C. Conn, Professor of Obstetrics and Gynaecology, on December 22, 1941, left a serious gap in the ranks of our medical staff. Our sorrow in his loss is tempered only by the memory of his splendid life of service to the University and the community.

My appointment to the Presidency led to the appointment of Dr. R. D. Sinclair as Dean of the Faculty of Agriculture. Dr. Sinclair was a member of our first graduating class in Agriculture, 1918, and has been on the staff of our Department of Animal Husbandry since 1922.

Dr. H. E. Bulyea has just retired as Director of the School of Dentistry after a service of twenty-two years. Here is another fine gentleman, who endeared himself to us by his personal qualities, just as he earned our respect by his devoted service. His mantle has fallen upon Dr. W. Scott Hamilton, well known as a successful instructor of long standing in our School of Dentistry.

Since penning this report in time for the Senate meeting on May 18, it has become my sorrowful duty to add a record of the passing on June 3, 1942, of John Alexander Weir, Dean of the Faculty of Law since its inception. Dean Weir was one of the great teachers of jurisprudence on this continent. Under his guidance the Faculty of Law achieved a standing second to none in this country. He earned the respect and affection alike of students and colleagues. His work and influence will long continue in the lives of the many well trained graduates who passed through his hands, as well as in the hearts of his many other friends.

Data concerning staff numbers, appointments, and resignations; student registration; gifts, scholarships, and prizes; staff publications; as well as reports by the Deans, Directors, Librarian, and Provost, are appended to this report.

### Staff Numbers

Following are statistics with reference to the teaching staff during the year:

#### *Full-Time Staff:*

(a) Professors .....	49
(b) Associate Professors .....	13
(c) Assistant Professors .....	16
(d) Lecturers .....	34

(e) Instructors .....	10
(f) Demonstrators and Assistants .....	7
	<hr/> 129
(a) On leave for war service .....	3
(b) On leave for war service .....	1
(c) On leave for war service .....	2
(d) On leave for war service .....	3

*Part-Time Staff:*

(a) Professors .....	12
(b) Associate Professors .....	4
(c) Assistant Professors .....	8
(d) Lecturers .....	19
(e) Instructors .....	12
(f) Demonstrators and Assistants .....	59
(g) Student Assistants .....	62
	<hr/> 176
(d) On leave for war service .....	2
(e) On leave for war service .....	2
(f) On leave for war service .....	6

*Library:*

Librarian .....	1
Assistants .....	7
Sessional Help .....	6
	<hr/> 14

*Department of Extension:*

Director .....	1
Assistant .....	1
Dramatic Secretary .....	1
Librarian .....	1
Assistant Librarian .....	1
	<hr/> 5

*Department of Industrial Research:*

Research Professor .....	1
Assistant Research Professor .....	1
Engineer .....	1
	<hr/> 3

*Industrial Laboratory:*

Director .....	1
Assistant .....	1
	<hr/> 2



## Staff Appointments

### *Faculty of Agriculture:*

- R. D. Sinclair, B.S.A., M.S., Ph.D., Acting Dean of the Faculty of Agriculture, from Sept. 1, 1941.
- A. G. McCalla, B.Sc., M.Sc., Ph.D., promoted from Sessional Lecturer to Professor of Field Crops, from Sept. 1, 1941.
- E. Bowser, M.Sc., Sessional Lecturer in Soils, from Jan. 1 to April 30, 1942.
- R. Price, B.Sc., Sessional Instructor in Animal Husbandry, 1941-42.
- B. C. Jenkins, B.Sc., Assistant in Field Crops, from April 1, 1942.
- J. H. Brown, B.Sc., Sessional Assistant in Entomology, 1941-42.

### *Faculty of Applied Science:*

- C. A. Robb, B.Sc., M.Sc., D.Eng., to resume his duties as Professor of Mechanical Engineering, Sept. 1, 1941, on return from war service.
- P. McPherson, B.Sc., Sessional Demonstrator in Civil Engineering, 1941-42.

### *Faculty of Arts and Science:*

- O. J. Walker, B.A., A.M., Ph.D., Acting Head, Department of Chemistry, from May 1, 1942.
- L. A. McLeod, B.Sc., Sessional Assistant in Chemistry, 1941-42.
- E. Fleming, B.A., M.A., Reader in English Literature, 1941-42.

### *Faculty of Education:*

- M. E. LaZerte, B.A., M.A., B.Ed., Ph.D., Dean, Faculty of Education, April 1, 1942.

### *Faculty of Medicine:*

- J. R. Vant, B.A., M.D., M.C.O.G., promoted from Assistant Professor to Associate Professor of Gynaecology and Obstetrics, from Dec. 1, 1941.
- Allan Day, M.B., promoted from Lecturer to Assistant Professor of Gynaecology and Obstetrics, Jan. 1, 1942.
- A. L. Shewfelt, B.S.A., Sessional Instructor in Biochemistry, Jan. 1 to April 30, 1942.
- L. C. Harris, M.D., C.M., Assistant Demonstrator in Medicine, Jan. 1 to April 30, 1942.
- J. B. MacKay, M.B., Ch.B., Acting Assistant Demonstrator in Clinical Medicine for the session 1942-43.
- M. M. Sedera, M.D., A. W. Hardy, M.D., H. L. Richards, M.D., R. J. Zender, M.D., Sessional Demonstrators in Anatomy, 1941-42.
- W. S. Anderson, B.Sc., M.D., F.R.S.C., Sessional Assistant Demonstrator in Clinical Surgery, 1941-42.
- W. S. Archibald, B.A., M.D., C.M., Session Assistant Demonstrator in Clinical Surgery, 1941-42.

### *School of Dentistry:*

- P. J. Kendal, D.D.S., T. Hawker, D.D.S., O. M. Wright, D.D.S., Sessional Demonstrators in Dentistry, 1941-42.
- E. Perkins, R.N., Nurse for School of Dentistry for session 1941-42.
- C. D. Husband, D.D.S., Honorary Lecturer in Local Anaesthesia from June 1, 1942.



*School of Pharmacy:*

A. W. Matthews, M.Sc., Ph.D., Acting Director, School of Pharmacy, from May 1, 1942.

M. J. Huston, M.Sc., Instructor in Pharmacy, from May 1, 1942.

*Department of Extension:*

S. Hillerud, B.S.A., Assistant in Study Groups, 1941-42.

*Department of Physical Education:*

K. E. B. Foscett, B.A., Instructor in Physical Education for Women, from Sept. 1, 1941.

*Summer Session:*

John Macdonald, M.A., D.Litt., Director, Summer Session, 1942.

**Resignations and Enlistments**

H. E. Smith, B.A., M.A., B.Ed., Ph.D., Associate Professor of Education, leave of absence from October 10, 1941, for enlistment.

H. B. Mayo, B.A., B.A., Department of Extension, resigned Oct. 31, 1941, for enlistment.

D. M. Healey, B.A., Dip.d'Et.Sup., L-es-L., Lecturer in Modern Languages, enlisted.

Douglas Smith, M.A., Ph.D., Lecturer in Psychology, leave of absence for enlistment.

E. Hitchin, M.D., Sessional Assistant Demonstrator in Clinical Surgery. On active service.

W. C. MacKenzie, B.Sc., M.D., C.M., M.S., Sessional Assistant Demonstrator in Clinical Surgery. On active service.

O. Rostrup, M.D., Sessional Demonstrator in Anatomy. On active service.

R. A. McEwen, D.D.S., Sessional Demonstrator in Prosthetic Dentistry. On active service.

Miss Florence E. Dodd, B.Sc., Adviser to Women Students, retired April 30, 1942.

J. W. Shipley, B.A., M.A., Ph.D., F.C.I.C., F.R.S.C., Professor of Chemistry, retired April 30, 1942.

C. A. Robb, B.Sc., M.Sc., D.Eng., Professor of Mechanical Engineering, resigned April 30, 1942.

F. A. S. Dunn, Ph.C., M.Sc., M.P.S., F.R.S.A., Professor of Pharmacy, resigned April 30, 1942.

L. B. Pett, M.A., Ph.D., F.C.I.C., Lecturer in Biochemistry, resigned November 9, 1941.

J. W. Boyes, B.Sc., M.Sc., Ph.D., Assistant Professor of Field Crops, resigned April 30, 1942.

J. G. Roberts, L.D.S., D.D.S., Lecturer in Dental Radiology, resigned April 30, 1942.

**REGISTRATION BY FACULTIES**

As distributed in the various faculties and schools the numbers are as follows:

Total registration .....	2,045
1. Arts and Science .....	693
B.A. and B.Sc. ....	402
School of Commerce .....	65
School of Household Economics .....	94
Auditors .....	3
Special .....	5

Combined Courses:		
Arts and Medicine .....	86	
Arts and Dentistry .....	4	
Arts for Dentistry .....	18	
Arts and Law .....	14	
Arts and Applied Science .....	1	
Arts and Commerce .....	1	
	—	124
2. Applied Science .....		309
First Year .....	108	
Second, Third and Fourth Years:		
Chemical Engineering .....	70	
Civil Engineering .....	41	
Electrical Engineering .....	54	
Mining Engineering .....	29	
Engineering Physics .....	4	
Partials .....	3	
3. Agriculture .....		113
4. Law .....		45
5. Medicine .....		429
Medicine .....	193	
Dentistry .....	48	
Pharmacy Degree .....	21	
Pharmacy Diploma .....	29	
Nursing Degree .....	76	
Nursing Diploma .....	60	
Diploma in Public Health .....	1	
6. College of Education .....		66
7. Divinity .....		9
8. Summer Session (1941) .....		349
9. Short Course in Agriculture .....		23
10. Graduate Students .....		87
Arts and Science:		
M.A. ....	19	
M.A. (Educ.) .....	4	
M.Sc. ....	14	
M.Educ. ....	12	
Agriculture:		
M.Sc. ....	18	
Special Students .....	20	
Total .....		2,123
Less duplicates in Summer Session, etc. ....		78
		—
Total .....		2,045
		—

## GIFTS, SCHOLARSHIPS AND PRIZES

### Gifts:

From the National Research Council: To the Department of Field Crops for research, \$7,737. To the Department of Soils for research, \$505.82. To Dr. Sandin, Department of Chemistry, for work of the Associate Committee on Medical Research, \$300; for war projects, \$850.

From the Canada Malting Company: To the Department of Field Crops for research, \$1,000.

From the United Grain Growers: To the Department of Field Crops for research, \$1,000.

From the Alberta Wheat Pool: To the Department of Field Crops for research, \$100.

From the Carnegie Corporation: To the Banff School of Fine Arts, \$1,500.

From the Rockefeller Foundation: For work and equipment in Dramatics, \$4,000. For a fellowship for advanced study in drama, \$100 per month, plus allowances of \$50 for wife and \$20 for child.

From the Dominion Government, Department of Labour: To the Faculties of Medicine and Dentistry to meet additional sessional honoraria and laboratory supplies, \$7,000.

From the Edmonton Horticultural Society: To the Department of Horticulture for the maintenance of test plots, \$50.

From the W. K. Kellogg Foundation: To the Faculty of Medicine, \$7,000 for loans to needy students, \$3,000 for grants to needy students. To the School of Dentistry, \$3,000 for loans to needy students, \$2,000 for grants to needy students.

From Dr. C. M. Vanstone of the Wawanese Mutual Life Insurance Company: To the Director of the Department of Extension for a student in a School of Community Life, \$100.

Dominion-Provincial Grants: To needy students, \$20,000—50% from the Provincial Department of Education and 50% from the Dominion Department of Labour.

Miscellaneous: From the Alumni of the Faculty of Agriculture, E. A. Howes Memorial Plaque. From Mrs. C. McNabb to the School of Dentistry, eight books. From Mrs. S. W. Firth to the School of Dentistry, a dental chair. From Mrs. Dixon Craig to the Faculty of Law, the law library of the late Mr. Dixon Craig. From the Caulk Manufacturing Company to the School of Dentistry, a kit of dental supplies. From Miss Linda B. McAdam to the Museum, an Indian basket.

### New Scholarships.

The Robert Tegler Trust has provided two special scholarships for handicapped students, tenable in any faculty to which the students can be admitted, and available to new students or continuing undergraduates. While due weight will be given to the academic record of the candidates, special consideration will be given to their background, financial need, nature of handicap, personal qualities, and other relevant points. The value of each scholarship will be equal to the annual fees in the faculty concerned, plus a subsistence allowance of \$300 for the academic year.

Mr. J. S. McLean, Toronto, has renewed his gift of \$1,000 for scholarships. Eight bursaries of \$125 each are available to students who have previously been in

attendance at University and are continuing. They are awarded on the bases of academic record and financial need and are open to students from farm homes and are tenable in any faculty of the University.

### **New Prizes:**

The Aristide Blais Prize in French, \$25.00, is the gift of Senator Blais, to be awarded annually to an undergraduate, fluent in the French language, who obtains the highest first-class standing in either French 51 or French 107, two courses offered in alternate years.

## **PUBLICATIONS BY STAFF**

### **Department of Accounting.**

Winspear F. G.: The development of time-saving devices in municipal offices, *Western Municipal News*, June, 1942.

### **Department of Animal Science.**

Bowstead, J. E., Sackville, J. P., and Sinclair, R. D.: The development of cobalt deficiency in sheep, *Scientific Agriculture*, 22:5314-325, January, 1942.

Bowstead, J. E., Sackville, J.P., and Sinclair, R. D.: The efficacy of cobaltized salt for the prevention of cobalt deficiency in sheep, *Scientific Agriculture*, 22:8479-481, April, 1942.

Sinclair, R. D.: Swine production in Alberta, *Bulletin No. 22* (5th edition), University of Alberta, June, 1942.

### **Department of Biochemistry.**

Hunter, G., and Nelson, J. A.: On 4- (or 5-) amino-glyoxaline (iminazole), *Can. J. Research, B*, 19:296-304, 1941.

Hunter, G., and Hlynka, I.: On a new indigoid formed from the glyoxaline (iminazole) nucleus, *Can. J. Research, B*, 19:305-309, 1941.

Hunter, G., and Raragosky, T. M.: On the determination of urinary glyoxalines (iminazoles), *Can. J. Research, B*, 19:310-317, 1941.

Hunter, G.: Refrigerating condenser, application in vacuum distillation assembly, *Can. Chem. and Process Industries*, 25:477-450, 1941.

Hunter, G.: A glass water bath, *J. Chem. Education*, 18:299, 1941.

Dunkley, W. L., Hunter, G., Thornton, H. R., and Hood, E. G., Studies on surface taint butter, II. An odourous compound in skim milk cultures of *Pseudomonas putrefaciens*, *Scientific Agriculture*, 22:347-355, 1942.

Conn, L. C., Vant, J. R., and Cantor, M. M.: A critical analysis of blood loss in 2000 obstetric cases, *Amer. J. Obst. Gyn.* 42:768-785, 1941.

Pett, L. B., McKirdy, J. A., and Cantor, M. M.: The evaluation of preparations of the vitamin B-complex, *Can. Med. Assn. J.*, 46:413-416, 1942.

Le Page, G. A., and Pett, L. B., Absorption experiments with vitamin A, *J. Biol. Chem.*, 141:747-761, 1941.

### **Department of Chemistry.**

Walker, O. J., Harris, W. E., and Rossi, M.: Selenium in soils, grains, and plants in Alberta, *Can. J. Research, B*, 19:173-178, 1941.

## **Department of Civil Engineering.**

Morrison, I. F.: The fundamentals of pile foundations, *The Engineering Journal*, 22:431-434, October, 1939.

Morrison, I. F., and Cornish, W. E.: Description of pressure cell for the measurement of earth pressure, *Canadian Journal of Research*, 17:216-220, Nov., 1939.

Müller, R.: Computation of seepage through earth fills, translated from German by I. F. Morrison and H. R. Webb, *Canadian Engineer, Water and Sewage*, 78:14-20 and 50-52, July, 1940.

Morrison, I. F., The elastic equation for beams, *Canadian Engineer, Roads and Bridges*, 78:48 and 60, Sept., 1940.

Morrison, I. F.: The design of spread footing, *The Engineering Journal*, 24:10-14, January, 1941.

Morrison, I. F.: The solution of simultaneous linear equations in structural analysis, *The Engineering Journal*, 24:386-387, August, 1941.

Morrison, I. F.: Notes on the Science of Solid Materials, The Institute Press, Edmonton, October, 1941.

## **Department of Classics.**

Johns, W. H.: Terms of enconium in Cicero, *The Classical Bulletin*, 17, December, 1941.

Hardy, W. G.: All the Trumpets Sounded, Macmillan's, Toronto, April, 1942, Coward-McCann, New York, July, 1942.

## **Department of Dairying.**

Thornton, H. R.: Standard methods for the examination of dairy products. Section D. Methylene blue reduction method, A.P.H.A., New York, 8th Ed., 58-73, 1941.

Jointly with Dairy Research, Science Service, Department of Agriculture, Ottawa, under the general title "Studies on Surface Taint Butter." Paper No. II jointly also with Department of Biochemistry.

Wolochow, H., Thornton, H. R., and Hood, E. G.: I Odour production by pseudomonas putrefaciens, *Sci. Agr.*, 22:277-286, 1942. III Some further characteristics of pseudomonas putrefaciens, *Ibid.*, 438-477. IV Distribution and taxonomy of pseudomonas putrefaciens, *Ibid.*, 461-464. V The growth of pseudomonas putrefaciens in butter, *Ibid.*, 552-560. VI Other bacterial species as casual agents, *flavobacterium maloloris*, *Ibid.*, 637-644.

Dunkley, W. L., Hunter, G., Thornton, H. R., and Hood, E. G.: II An odorous compound in skimmilk cultures of pseudomonas putrefaciens, *Ibid.*, 347-355.

## **Department of Electrical Engineering.**

Cullwick, E. G.: The theory of some A.C. commutator motors with series characteristics. I. The repulsion motor, *Can. J. Research*, 20:49-70, 1942. II. The winter-eichberg compensated repulsion motor, *Can. J. Research*, 20:83-95, 1942.

## **Department of English.**

Salter, F. M.: Scientific method in literary research, *University Review*, University of Kansas City, 273-287, 1942.

### **Department of Field Crops.**

McCalla, A. G., and Rose, D.: The quality of Alberta grown wheat, University of Alberta Coll. of Agr. Bull. 37, 1941.

McCalla, A. G., and Gralen, N., Ultracentrifuge and diffusion studies on gluten, Can. J. Research, C, 20:130-159, 1942.

### **Department of Geology.**

Allan, J. A.: Structures in the Rocky Mountains of western Alberta, Geol. Soc. of America, Vol. 52, No. 12, Pt. 2, Abstract:1887, 1941.

Rutherford, R. L.: Large glacial erratics, Amer. J. of Sci., 240:448-449, June, 1942.

Rutherford, R. L.: Some aspects of glaciation in central and southwestern Alberta, Trans. Royal Soc. of Canada, Vol. XXXV, Sec. IV:115-124, 1941.

### **Department of History.**

Long, M. H.: A History of the Canadian People, Vol. I, New France, Ryerson Press, Toronto, 1942.

Collins, R. W.: The mediaeval peasant and his ways, Dalhousie Review, January: 414-426, 1942.

### **Department of Horticulture.**

Shoemaker, J. S.: Selected varieties at University of Alberta, Que. Glad. Soc. Yearbook, 6:49-52, 1942.

Shoemaker, J. S.: Results of reseearch in the gladiolus test garden at the University of Alberta, Can. Glad. Soc. Annual, 21:61-73, 1942.

Shoemaker, J. S.: New developments in gladiolus culture, New England Glad. Soc. Yearbook, 17:134-157, 1942.

Shoemaker, J. S., and Walkof, C.: Sweet corn in Alberta, University of Alberta Bull. 38, 75 pp., 1941.

Shoemaker, J. S., and Hargrave, P. D.: Budding and grafting, Alberta Dept. Agr. and Univ. of Alberta Joint Series Publ. 2, 37 pp., 1942.

### **Department of Medicine.**

Scott, J. W.: Natural history of migrane, C.M.A.J. 45, 6, 543-545, 1941.

MacLean, R. R.: The problem of the morphine addict in Alberta, Alberta Medical Bulletin, January, 1942.

Malcolmson, P. H.: Direct positive micro-film for the reproduction of radio-graphs, C.M.A.J. 46, 1, 68-69, 1942.

### **Department of Modern Languages.**

Sonet, E.: Veille d'Examen, Macmillan, Toronto, 1942.

Healy, D. E.: Mary Shelley and Merimee, Modern Language Review, July, 1941.

### **Department of Pathology.**

Dowding, E. S., and Gowan, E. H., The migration of fungal nuclei in an electric field, Can. J. Research, C, 20:92-100, 1942.

### **Department of Pharmacy and Materia Medica.**

Foote, P. A., and Matthews, A. W.: Florida volatile oils II, Mentha Piperita L., Journal Amer. Pharm. Assoc., 31:65-72, 1942.



### **Department of Philosophy and Psychology.**

MacEachran, J. M.: John Watson, Some Great Men of Queen's, Ryerson Press, Toronto, 22-51, November, 1941.

### **Department of Physiology and Pharmacology.**

Wright, H. N., and Rodman, F. B.: Comparative distribution and retention of crystalloid and colloid fraction of arsphenamine and neoarsphenamine, *Proc. Soc. Exp. Biol. Med.*, 49:229-231, 1942.

### **Department of Political Economy.**

Elliott, G. A.: Price ceilings and international trade theory, *Can. J. Economics and Political Science*, 8:186-197, 1942.

Stewart, A., and Porter, W. D.: Land use classification in the special areas of Alberta, Publication No. 731, Technical Bulletin No. 39, Dominion of Canada, Department of Agriculture, Ottawa, 1942.

### **Department of Soils.**

Wyatt, F. A., Newton, J. D., and Ignatieff, V.: Wooded soils and their management, *Bull. No. 21, U. of A.*, Third revision, July, 1941.

Carlyle, R. E., and Newton, J. D.: Peat and commercial fertilizers as amendments for gray wooded soils, *Can. J. Research, C*, 20:68-84, February, 1942.

Bowser, W. E.: Mechanical composition of some characteristic soil profiles from southern Alberta, *Sci. Agr.* 22, 6:341-346, February, 1942.

Erdman, R. L.: Effects of wind erosion on the composition and fertility of some Alberta soils, *Sci. Agr.* 22, 9:533-545, May, 1942.

### **Department of Surgery.**

Hepburn, H. H.: Pension problems, *C.M.A.J.*, 45, 1, 74-77, 1941.

Hepburn, H. H.: Removal of a large intraventricular brain tumour; case, *C.M.A.J.*, 46, 5, 477-478, 1942.

Whiteside, W. C.: Primary carcinoma of the lung, pneumonectomy, *C.M.A.J.*, 45, 5, 436-438, 1941.

### **Department of Zoology.**

Miller, R. B.: A contribution to the ecology of the chironomidae of Costello Lake, Algonquin Park, Ontario, *Univ. Toronto Studies, Biol.* 49, *Pub. Ont. Fish. Res. Lab.*, 60, 1941.

## **EXCERPTS FROM THE REPORTS OF ADMINISTRATIVE OFFICERS**

The following excerpts from the reports of administrative officers give some indication of the broad scope of the work of the University.

### **Report of Dean G. M. Smith of the Faculty of Arts and Science**

#### **1.—Registration.**

During the regular academic session, 1941-42, 693 students were registered in the Faculty of Arts and Science as compared with 753 in 1940-41. The registrations declined in all divisions of the Faculty except in the general course leading to the B.Sc. degree in Household Economics and in the preliminary year for Dentistry, where there were slight increases.

## 2.—*Recommendations for Degree, May 1942.*

The number of students recommended by the Faculty of Arts and Science for degrees in May, 1942, was as follows:

For the B.A. degree .....	102
For the B.Sc. degree .....	61
For the B.Com. degree .....	20
For the degree of B.Sc. in Household Economics .....	24
	<hr/>
	207

## 3.—*Legislation.*

Following the publication in February, 1942, of the report of the Survey Committee appointed by the Government of Alberta in August, 1941, and the establishment of a Faculty of Education, combined courses were arranged in Arts and Education, Science and Education, Commerce and Education. In these four-year courses leading to combined degrees the present requirements for degrees in the Faculty of Arts and Science remain the same, but the required courses in Arts and Science are distributed over four instead of over three years, and some part of the professional training in Education has been allotted to the first three years and will no longer be concentrated in a post-graduate year. The combined degrees will be awarded at the end of the fourth year.

To give effect to another recommendation of the Survey Committee, the Faculty of Arts and Science from and after September, 1943, will offer courses at the Grade XII level in Mathematics, in the Sciences, and in Languages (French, German, Latin, and Greek). For admission to these courses the requirement will be the High School Graduation Diploma with at least B standing in English and Social Studies. These arrangements are being made to provide for students who follow the new curriculum in the schools of Alberta to the High School Graduation Diploma without meeting all the requirements of matriculation into certain faculties. Admission to the University by this method without complete matriculation may mean an additional year in the time normally required for a degree or diploma.

## 4.—*New Courses.*

Under conditions of war and of restricted income, the establishment of new courses was avoided. However, to facilitate the training of certain students for war purposes, the Department of Physics will offer two new courses in 1942-43, one in Electronics and Radio, the other in Meteorology.

## 5.—*Enlisted Students.*

In respect of enlisted students the arrangements of 1940-41 were continued. Certain minor deficiencies in the requirements for degrees were overlooked and minor concessions granted. Students with good standing who were called for active service after 15th March and were unable to write some or all of the April examinations were recommended for complete standing in their years. Enlisted students in Arts and Law were recommended for the B.A. degree at the end of the third year, on completion of all strictly Arts courses.

## 6.—*Military Training.*

Students loyally observed the rules of the War Service Training Board in respect of military training.

### *7.—Services of the Staff in respect of Military Training.*

Many members of the Faculty, other than those who were members of the O.T.C., gave valuable assistance in the field of military training by offering courses of lectures in many branches of military science to the O.T.C. and Auxiliary Battalion. Others gave refresher courses in Physics and Mathematics throughout the year to R.C.A.F. cadets at the Manning Depot. Members of this Faculty also served as instructors in the Air Force schools for radio mechanics conducted in the University under the direction of Professor Cullwick, and in the school for artificers and electricians conducted for the Navy.

### *8.—Acceleration of Courses.*

After careful study of the question the Faculty of Arts and Science decided not to accelerate the training of students in the departments such as Chemistry, Physics, Mathematics, Geology, from which there is a demand for recruits to war industries or the government services. It seemed more advantageous to permit students in Science to accept temporary work during the summer months under the instructions of the Wartime Bureau of Technical Personnel.

### *9.—Dominion-Provincial Grants-in-Aid.*

The Faculty of Arts and Science joins the other faculties in grateful acknowledgment of the grants-in-aid to able students who might have been unable to continue their University courses without financial help.

## **Report of Dean R. D. Sinclair of the Faculty of Agriculture**

Inasmuch as the Faculty of Agriculture in this University functions along two main lines, (1) academic and (2) experimental, this report will be presented in two sections and under these headings. It may be pointed out that in addition to teaching and carrying on research work in the University, members of the staff of the Faculty of Agriculture maintain a close contact with the farm population of Alberta by means of delivering lectures at farm meetings, agricultural short courses and field days, judging at fairs, giving radio talks and replying to correspondents who inquire on a wide variety of agricultural problems. Certain phases of this extension work are effected through close co-operation with the Alberta Department of Agriculture.

### *1.—Academic.*

The freshman class which was enrolled for the 1941-42 academic term came in under the new matriculation standards of Grade XII for students from the high schools and Grade XI plus a certificate of qualification for the students from the Schools of Agriculture. Students in both groups will require a minimum of four years to complete the requirements for the degree of B.Sc. in Agriculture. The total faculty registration for the year was 113 as compared with 156 last year. The graduating class of 30 was the largest in the history of the Faculty. Members of the graduating class have registered with the Wartime Bureau of Technical Personnel in order that their services may be utilized to best advantage in the war effort. Several have enlisted already for active service.

The Alberta Wheat Pool again assisted the graduands in identifying themselves with professional agriculture by paying the initial membership fee to the Canadian Society of Technical Agriculturists.

The annual creamery short course which was given as usual in co-operation with the Provincial Dairy Branch was attended by 23 creamery employees. In view of labour shortage, creamery operators are finding it necessary to employ women to undertake certain types of work formerly carried on by men. To assist in this connection, a one-week short course was offered this year in cream testing. Twelve women and one man were registered in this course.

A committee on Professional Experience, which was established early in 1941 in co-operation with the Canadian Society of Technical Agriculturists to assist students in finding a type of summer employment which would supplement their academic training to advantage, has functioned in a very useful way.

During the year an arrangement was effected whereby the Departments of Animal Husbandry, Poultry, and Veterinary Science were combined in one department, to be designated "Animal Science." This adjustment should result in a more satisfactory integration of the academic and research work of these allied departments and in even greater assistance to the field of animal production than has been given in the past.

## *2.—Experimental.*

The Department of Soils continued soil survey work activity during the year in co-operation with the Dominion Prairie Farm Rehabilitation organization. The report of the Blackfoot-Calgary Sheet is practically ready for publication. Field work on the Rosebud-Banff Sheet is completed and a report is being prepared. Experiments dealing with the fertilizer requirements of grey wooded and peat soils are being continued and studies on the effects of cultivation and cropping on the chemical composition of western Canadian prairie soils are in progress.

The Department of Animal Husbandry has shaped its experimental programme during the year to study problems which have developed out of the increased demand for animal products in relation to the war effort. Special attention has been paid to problems of swine nutrition since Alberta will undoubtedly produce 40% of the bacon required for export to Britain during the year. Experiments to determine the suitability of wheat as a livestock feed have been under way during the past year. Beef cattle studies have been enlarged to include a four-year project planned to determine the possibility of utilizing the dual-purpose cow in beef raising. This investigation also provides opportunity for a study of the value of certain breeds for crossing purposes and of the carrying capacity of pasture in the black soils of Alberta.

The twenty-second annual Feeders' Day held in June was attended by 400 farmers from various parts of the Province. A representative exhibit of market cattle of three beef breeds was shown at the Chicago International Livestock Exposition in December and, in strong competition, the University entries won two firsts and three seconds, as well as several other awards. Expressions of appreciation of the value of this enterprise have been received from both Dominion and Provincial Breed Associations.

In the Department of Field Crops good progress was made during the year in cereal breeding work. In addition to the development of promising wheat and barley strains, a particularly timely project was designed to produce an early, large-seeded flax. In view of the need for increased barley and flax production at the present time, it is worthy of note that Newal barley and Redwing flax, both varieties developed in the Department of Field Crops, have made an important

contribution to the production of these two crops in Alberta. During the year a new variety of alfalfa, Ferax, was distributed and proved much superior in seed setting qualities than those in common use. Plant biochemistry studies have been concerned largely with starch, dried gluten and the vitamin B complex of wheat, all matters of importance either from the standpoint of industrial uses for wheat or better nutrition. Research in plant pathology was concerned with the prevention of diseases of cereal and vegetable crops. Much of the work in the Department of Field Crops is supported by grants from the National Research Council, the United Grain Growers Limited, the Alberta Wheat Pool, and Canadian Industries Limited.

The Department of Agricultural Engineering has continued to gather information on the costs of power farming and during the year has assisted in the work of the Western Agricultural Engineering Committee. This Committee, in addition to organizing investigational work on farm machinery, has acted during the past year in an advisory capacity to the Farm Machinery Administration (War-time Prices and Trade Board) with respect to farm equipment needs. A bulletin on seeding machinery was prepared at the request of the Agricultural Engineering Committee of the P.F.R.A. for distribution through the Agricultural Supplies Board, the request having been made from that body to the Agricultural Engineering Committee.

Substantial progress has been made in Alberta during recent years in vegetable seed production and in large-scale growing of vegetable crops for canning. In helping with this development the Department of Horticulture has placed special emphasis on vegetable crops in its research programme during the past year. Experimental work with fruits and flowers is being continued.

Certain studies which were being carried out by the Department of Dairying, in co-operation with the Division of Bacteriology and Dairy Research, on surface taint in butter were concluded during the year and publication of the results is in progress.

The call from Great Britain for eggs from this country suggests that the farm flocks of poultry in Alberta should be maintained in a high state of breeding efficiency. Studies being carried on by the Poultry Department, co-operating with the Department of Biochemistry and the Provincial Poultry Branch, are aimed at improving hatchability and growth by the addition of vitamin supplements (notably riboflavin) to poultry rations.

During the year a Joint Agricultural Publications Committee was set up between the University of Alberta and the Alberta Department of Agriculture. This Committee will aim to avoid duplication of publications and arrange for joint authorship when such is considered advisable. Under this arrangement the cost of certain types of publications will be borne by the Department of Agriculture.

Publications issued during the year for farmers' use were the following:

*Bulletin:*

- No. 21—Wooded Soils and Their Management (Revised—3rd ed.).
- No. 22—Swine Production in Alberta (Revised—5th edition).
- No. 24—Insect Pests of Grain in Alberta (Revised).
- No. 36—Soil Survey of Milk River Sheet.
- No. 37—The Quality of Alberta Grown Wheat.
- No. 38—Sweet Corn in Alberta.



*Joint Series:*

No. 1—Wheat for Swine in Alberta.

No. 2—Budding and Grafting.

**Report of Dean R. S. L. Wilson of the Faculty of Applied Science**

The number of undergraduates in this Faculty during the current session is 309, which is 6 fewer than last year.

Student successes and failures are approximately in the same ratio as in earlier sessions. Withdrawals to enlist in the armed forces have increased, particularly in the first two years. The time spent on military training may possibly have been a contributing factor to cause a few academic failures.

The demands for graduates, and for undergraduates during the long vacation, have increased beyond anything experienced in earlier years. The Federal Government departments concerned with the supply of technical personnel are encouraging the universities to utilize their facilities for the training of engineers and others in closely related sciences to the utmost possible capacity. It is to be hoped that means may be found for accommodating even larger freshman classes than ever before.

Last fall it was impossible to find a sufficient number of qualified demonstrators for the Department of Civil Engineering. There is still lacking proper accommodation for the classes in Drawing in the junior years. It was impossible to procure the old Garneau school which had been used in the preceding session. This made necessary a return of these classes to the make-shift arrangements in Convocation Hall. There is a serious need for the completion of arrangements and the provision for facilities for the students in third and fourth years of Chemical Engineering. This group of students is now larger than that of any other division of engineering and is still without a home. The administration of what should become a Department of Chemical Engineering has been placed in the hands of a committee, and this is a decided improvement over any previous arrangement.

In June, 1941, the Department of Electrical Engineering undertook the technical training of a class of 120 Airmen in radio mechanics. Beginning in May, 1942, another class of half this size was trained in the same work. During the winter the head of the Department of Electrical Engineering took the initiative in offering training facilities to the Royal Canadian Navy, with the result that in May a group of 100 artificer apprentices, engine-room artificers, and petty officers began a fourteen week electrical course. All of these activities have been carried on without addition to the financial burden of the University, and have resulted incidentally in a valuable expansion and extension of teaching facilities in the department concerned. Fine co-operation was obtained from the Department of Physics and the Department of Mathematics in this extra work.

Practically all members of the staff in the three engineering departments were occupied during the long vacation on essential war work and on certain researches closely allied to war problems.

**Report of Dean M. E. LaZerte of the Faculty of Education**

During the period under review, this Faculty was officially designated "College of Education".

In spite of the effect of the war, the College of Education functioned effectively in teacher-training during the year. Although Dr. H. E. Smith was called to the



Department of National Defence to participate in the organization of personnel work, we have managed, by dropping a few services, to carry on with the assistance of one or two members of the Arts and Science Faculty. Dr. John Macdonald of the Department of Philosophy and Mr. F. M. Salter of the Department of English came to our aid; the former during the first term, the latter until the end of the regular session.

In the summer session of 1941 the College of Education offered four lecture courses: Education 54, Education 56, Education 60, and Education 101. Registrations in these courses were 36, 37, 76, and 10 respectively. There were 99 students in the summer session proceeding to either the B.Educ. or M.Educ. degree.

The enrolment in the winter session teacher-training classes was about the same as in years previous to 1940-41. We had 31 candidates in training for high school certification. At the beginning of the session four graduate students registered for regular intramural study. Unfortunately the scarcity of teachers made it impossible for these students to continue with graduate work as they were practically forced to accept teaching positions when the number of vacancies in the high schools increased during the autumn months of 1941.

During the period from July 1, 1941, to June 30, 1942, the following numbers of candidates qualified for the diplomas and degrees indicated: 13 for the Junior Diploma of the College of Education and for the Junior Certificate for the High School; 47 for the Senior Diploma of the College of Education and for the High School Certificate; 19 for the B.Educ. degree; and 2 for the M.A. in Education.

During the past year an acute teacher shortage developed in the Province owing to war conditions. To meet the emergency the Faculty of Education arranged a special session of the teacher-training class to begin on May 20. Thirty-three students registered in the course and are now proceeding as candidates for high school teaching certificates. These teachers will be released to accept teaching positions on September 1. They will return in the summer session of 1943 to complete their interrupted programmes of study.

### **Report of Professor M. M. MacIntyre of the Faculty of Law**

In September, 1941, the Faculty of Law opened its term with 45 students. Of this number 13 received the degree of Bachelor of Laws at the Thirty-Second Annual Convocation on May 19, 1942. Of this graduating class 10 entered the armed services before or immediately upon graduation. (Of the remaining 3, 1 is physically unfit and I understand that 2 have applications for commissions pending.) Of the remaining 32, 9 entered the armed services without completing the work leading to the degree of Bachelor of Laws. Of these 9, 5 enlisted from the first year and 4 enlisted from the second year. This will leave 23 students to enroll in September, 1942, in addition to students who will enter first year Law.

Notwithstanding the very active part taken by Law students in the Canadian Officers' Training Corps during the academic year just ended, the work done by these students was of very high quality. This is in part due to the fact that our entrance requirements are high, and in part to our good fortune in maintaining an excellent morale among the students in the Faculty. There were in all seven students who attained first class general standing, and there were no failures. Because of the ruling of General Faculty Council reducing the first class line to 80%, no student in the Faculty of Law received a Board of Governors Honor Scholarship.

The Alberta Law Quarterly completed its eighth year of successful publication. Within the period covered by this report it has to my knowledge been referred to in court, with approval, by two justices of the Appellate Division of the Supreme Court of Alberta. Favorable comment upon the quality of the material published in it has come from professors at Harvard Law School, professors in the Faculty of Law at the University of Minnesota, and from numerous other professional sources.

J. A. Weir, K.C., Dean of the Faculty and Professor of Law, became seriously ill on April 2, 1942, and died on June 3, 1942. His untimely death is a great loss to the University and to the legal profession.

### **Report of Acting Dean J. J. Ower of the Faculty of Medicine**

Herewith a short report of the activities within the Faculty of Medicine, including the affiliated Schools of Pharmacy, Dentistry, and Nursing during the past session.

#### *Pharmacy.*

Lectures in Pharmacy were given to various classes of medical, dental, and nursing students as heretofore.

This year is the twenty-fifth anniversary of the opening of the school of Pharmacy, during which period 408 students have been graduated. Of this number 72—22 women and 50 men—have been granted degree of B.Sc. in Pharmacy, and 336—37 women and 299 men—have been granted the diploma of Pharmaceutical Chemist.

#### *Dentistry.*

In order to meet the pressing need for dentists in the Active Service Forces the School proposes to accelerate all classes synchronously with those in the Medical Faculty—the advanced session commencing June 1, 1942. A special loan and fellowship grant to aid needy dental students in the accelerated courses has been received from the W. K. Kellogg Foundation.

The whole student personnel in the School of Dentistry took the required military training during the past session, although it was felt that this may have been something of a hardship for the final year. In the new scheme of acceleration it is expected that the military training requirements will be waived. The eligible students of the fourth and fifth years who apply will be enlisted in the Royal Canadian Army Dental Corps and placed on pay and allowances.

The Dental School is in urgent need of equipment and better quarters. These needs have been drawn to the attention of the Survey Committee, and it is hoped that favourable action may be taken in the matter.

#### *Nursing.*

In the absence of the Director, Miss Agnes Macleod, overseas, Miss Helen McArthur has acted as adviser to nursing students.

As in the case of other departments, a report on the activities of the School of Nursing was prepared for the Survey Committee—particular stress being laid on the inadequacy of housing and classroom facilities, problems which a suitable nurses' home would completely solve.

#### *Medicine.*

As noted in last year's report the medical course is in process of changing over from a one-year pre-medical and six-year medical to a three-year pre-medical and

five-year medical curriculum. For this reason there was no first year in Medicine during the past session, the corresponding year being the second year of the B.Sc., M.D., course. This caused a reduction of the number of students in Medicine proper by about twenty per cent, there being on the roll of the Faculty of Medicine for the session 1941-42, 194 students—14 women and 180 men.

As an emergency war measure and as arranged at the last meeting of the Senate, the graduation of the final year was advanced by approximately two months. Forty-seven graduating students received their degrees at a special Convocation on March 7, 1942.

The need for physicians to serve in the Armed Forces is still acute, and it is proposed to advance all the classes in Medicine and Dentistry by putting these two Schools into practically continuous operation, the first session commencing on June 1, 1942, and the following session on February 1, 1943.

With the exception of the fifth and sixth years the students of the Medical Faculty took the required military training during the past session. In the accelerated courses the requirement for military training of medical students in the University will be waived, and, as in Dentistry, all eligible students in the two upper years may enlist in the Royal Canadian Army Medical Corps with privates' pay and allowances.

A full statement of the difficulties in connection with clinical facilities, already noted in previous annual reports, was submitted to the Survey Committee, and the problem is mentioned here for record only.

The Faculty of Medicine has suffered a serious loss in the untimely death of Dr. L. C. Conn, Professor of Obstetrics and Gynaecology, a very worthy citizen and a teacher of great capacity with original methods. The Faculty of Medicine hereby pays tribute to the outstanding services of this man—"The freshness of our sorrow is still upon us."

Necessity for brevity in this report precludes more than passing mention of other items of interest: the Kellogg Foundation grant to medical students; the annual refresher course planned for next autumn; the scientific contributions of members of the Faculty to the literature, and to the meeting of the Canadian Medical Association at Jasper in June; the activities of the Medical Undergraduate Society, including the establishment of the Conn Memorial Reading Room; the organization of the Medical Alumni branch of the general University Alumni Association, etc.

### **Report of the Chairman of the School of Graduate Studies, Dean G. M. Smith**

During the academic year, 1941-42, 67 students were registered in the School of Graduate Studies as candidates for higher degrees. In addition 19 graduates who were not candidates for any higher degree were registered in the School as special graduate students.

The distribution of candidates for higher degrees according to Departments was as follows:

Animal Husbandry .....	2	Dairying .....	1
Biochemistry .....	2	Education .....	16
Civil Engineering .....	1	English .....	1
Chemistry .....	3	Entomology .....	1
Classics .....	2	Field Crops .....	8

Geology .....	3	Modern Languages .....	2
History .....	7	Philosophy .....	5
Horticulture .....	4	Political Economy .....	2
Industrial Research .....	1	Soils .....	3
Mathematics .....	1	Zoology .....	1
Mining Engineering .....	1		

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Through the generosity of the Tegler Trust, it became possible in September to award a Robert Tegler Research Scholarship for 1941-42. The successful candidate was Emil Anderson, B.Sc., Department of Horticulture.

The Robert Tegler Scholarship for 1942-43 was awarded to Robert Halladay Betts, Department of Chemistry; the University of Alberta Research Scholarships for 1942-43 to William Bredo, Department of Political Economy, and to Sybil Fratkan, Department of Chemistry. Mr. Bredo subsequently resigned the Scholarship to accept an appointment at Iowa State College.

### Report of the Librarian, Mr. D. E. Cameron

During the year the work of the Library has proceeded without interruption, the somewhat diminished registration making no perceptible difference to the calls on its service.

Under war conditions many difficulties have to be met. Deliveries are slower everywhere, and in the case of British books there is often long delay, and as a result an unusually large proportion of orders placed during the year remain unfilled. In some cases publishers lost their stock of books in print, and both stock and records of our London agents were destroyed. This loss in particular has involved an exceptional dislocation of the flow of books to us, and made necessary the repetition, after long delays, of missing orders, and the restoration by us from our records of all details lost in London. As an effect of wartime restrictions, no steel shelving can at present be bought by us, and our stock is at a low ebb.

Restrictions continue in effect regarding books and journals from enemy-occupied countries, but arrangements are being made by libraries on this continent to restore our holdings of these, at least so far as they can later be made available in microfilm reproduction. In this service the Rockefeller Foundation is playing a leading part.

A marked increase is noted during the year in the use made of the Medical Library by practitioners in the Province, the number of books sent out by mail being hundreds more than in the preceding year. The continued interest and support given by the College of Physicians and Surgeons of the Province, which gives an annual grant for medical books, is much appreciated. For the convenience of the medical profession the Library issued a printed catalogue of all additions to the Medical Library for the last ten years, for distribution to the practitioners of the Province.

Relations with other libraries continue to be vigorous and useful, and increased use of microfilm reproduction of required articles is steadily continuing, with a lessening of the number of books now required on inter-library loan. With the medical libraries of the United States and other countries exchange of duplicate books and journal parts has greatly developed, our library sending out and

receiving a steady flow of material, which now, each year, is of significant proportions.

The binding programme of the Library has been maintained during the year; the difficulty of obtaining some of the more used books has made it necessary to rebind books which ordinarily would be, to a large extent, replaced when worn out by later editions.

The pressure on the Library space continues, and the problem of finding room for books is always with us and adds greatly to the routine work of the staff.

The Woods collection on Canadian-United States Relations grows steadily by the acquisition of new books, and is to prove a most useful addition to our resources.

The portrait of Dr. W. A. R. Kerr presented to the University by members of the staff has been placed in the Main Reading Room, as also has an interesting fragment of a Pompeian frieze which was presented to the University by Dr. Erich Mueller of the Department of Modern Languages.

Among the gifts to be specially noted is the renewed grant of \$200 by the College of Physicians and Surgeons for medical books. An added grant was made by the College for books on medical history to be selected by Dr. Heber Jamieson. Many gifts of books and periodicals have been received and all have been suitably acknowledged.

The number of accessioned books is now 74,839, an increase of 2,500 during the year; greatly delayed deliveries have made this a smaller increase than normal.

The Librarian wishes to acknowledge the good work of the Library staff throughout the year under conditions of unusual pressure, caused in part by the absence on leave of two of its members, and acknowledges also the continued good relations existing between the Library staff and the academic staff of the University.

### **Report of the Provost, Dr. J. M. MacEachran**

#### **1.—*Students' Union.***

The Students' Union functioned very satisfactorily during the session under the capable Presidency of Mr. Robert A. Macbeth. The Students' Union made every effort to adjust student life to the difficulties involved in the war situation.

The session ended with a surplus of approximately \$2,500. Of this amount \$1,500 has been invested in War Bonds, and it is proposed to invest an additional \$1,000 in the same way.

#### **2.—*Student Contributions.***

During the session the following contributions were made to various wartime and charitable funds:

(1) Poppy Day—\$61.99 raised for the Canadian Legion.

(2) Students' Union Christmas Fund—\$535.12. This was used for sending hampers to needy families within the Province; they were distributed by District Nurses.

(3) Student Ambulance Fund—\$2,788.87. This was raised to contribute an ambulance to the Canadian Army. Much commendable enthusiasm was manifested by the various methods employed for raising this money.

(4) International Student Service—\$195.



(5) Mount Allison University Student Relief Fund—a Students' Union grant of \$100. This was in connection with losses suffered by students of Mount Allison University as a result of a fire in one of the residences.

(6) War Contact Fund—Students' Union grant of \$200 for university students and graduates overseas.

(7) Red Cross Prisoners-of-War Fund—a grant of \$25 from the Students' Union.

### 3.—*Student Athletics.*

During the session, intercollegiate activities were confined to competitions with the University of Saskatchewan in rugby, basketball, boxing, wrestling, and fencing. The University of Saskatchewan again carried off the honors.

The outstanding feature of men's athletics during the session was the inter-faculty competition in hockey, which was without doubt one of the most satisfactory and most enthusiastic athletic leagues ever organized on the campus. An effort will be made next session to extend this same type of organization to football and basketball.

The athletic organizations will greatly miss the very able coaching and leadership of Mr. Robert Fritz, Acting Athletic Director, who has enlisted in the R.C.A.F. Arrangements, however, are being made to obtain the services of local coaches. About 350 male students and 175 women students participated in athletics during the session.

### 4.—*Literary Society.*

The Philharmonic Society again did a very commendable piece of work in staging Gilbert and Sullivan's "Pirates of Penzance." They played to four full houses in Convocation Hall and to two full houses in the Western Canada High School in Calgary.

A new interest was created in the Political Science Club by an arrangement with the local Canadian Club in accordance with which some of its most prominent speakers were made available to the student body.

### 5.—*The Gateway.*

It is generally agreed that The Gateway staff of the past session has made a very commendable effort to attain a worthy standard as a student publication.

### 6.—*Medical Services.*

The Medical Services has been fortunate in not having any serious epidemics. It shows a surplus of approximately \$400 for the session. These services are now centered in the new Infirmary adjacent to the Medical Building.

### 7.—*Social Functions.*

In compliance with the instructions of the Senate to the Committee on Student Affairs, the Students' Council took action to reduce the number and cost of student functions. I may say that the Students' Council of this past session was in full agreement with the attitude which prompted the Senate to issue these instructions, and not only made a satisfactory reduction in the number and cost of dances but gave very valuable co-operation in the control of those functions which had to be held in the city. It gives me particular satisfaction to report that not a single case of discipline has arisen in connection with social functions during the session.



### 8.—*Discipline.*

There were no major cases of discipline during the session.

### 9.—*Student Accommodation.*

Before the opening of the session, advertisements were inserted in the local papers asking citizens of Edmonton who were willing to provide rooms or board or both to students to send their names to the Bursar's office. Cards were then sent out to be filled in, giving full particulars of the accommodation offered. These were made available to a Students' Housing Committee appointed by the Students' Council to give assistance in getting all students from outside Edmonton settled. The scheme worked very satisfactorily. Next session the Students' Housing Committee will have the benefit of additional information on the accommodation available in the city.

## Report of the Director of the Department of Extension, Mr. Donald Cameron

### *Statistical Survey.*

Number of lectures, general .....	128	
Aggregate attendance .....		9,792

### *Radio.*

Radio lectures, General and Agriculture .....	400	
Total number of studio programmes .....	127	
Total number of Remote Control programmes .....	14	
Total number school broadcasts .....	89	
Total number Symphony hours .....	296	
Total number plays .....	16	
Total number hours broadcasting .....	1,499½	
Number of listening groups, Farm Radio Forum .....	108	
Number of members in listening groups .....		1,500

### *Library and Debating Service.*

Number of Regular Libraries circulated .....	100	
Number of times sent out .....	135	
Number of Special Libraries circulated .....	58	
Travelling Library circulation:		
Regular .....	11,040	
Special .....	2,993	
	<hr/>	14,033

Small parcels of reference books and pamphlets for enterprise work .....	389
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### *Open Shelf Circulation:*

Books .....	12,551	
Pamphlets and clippings .....	1,071	
Periodicals .....	930	
	<hr/>	14,552

Books and magazines sent to Alberta School of Community Life .....	40	
Books and magazines sent to Banff School of Fine Arts .....	235	
	<hr/>	275

Communities supplied with single plays .....	326	
Number of adult single plays sent out .....	1,172	
Number of juvenile single plays sent out .....	64	

Number of juvenile collections .....	212	
Number of adult collections .....	372	
	<hr/>	1,820
Number of package libraries for debaters .....		250
<i>Visual Instruction.</i>		
Number of times lanterns loaned .....	67	
Sets of lantern slides circulated .....	649	
Number of times used .....	1,228	
Aggregate attendance lantern lectures .....		88,433
Sets of film-slides circulated .....	1,730	
Number of times used .....	3,329	
Aggregate attendance .....		108,700
Sets of moving pictures films circulated .....	1,881	
Number of reels in sets .....	9,215	
Number of showings .....	3,520	
Aggregate attendance at moving picture programmes .....		356,038
National Film Board:		
Number of showings of N.F.B. Programmes .....	597	
Number of places visited .....	191	
Aggregate attendance .....		113,895
<i>Conferences.</i>		
University Week for Farm Young People:		
Delegates .....	116	
Leaders .....	3	
	<hr/>	116
Refresher Course in Municipal Administration .....		64
Short Course Co-op. Store Managers and Employees.....		72
<i>Study Groups.</i>		
Number of sets of study material sent out to groups in Alberta .....	155	
Estimated attendance at study groups .....		775
Number of students in W.E.A. Study Classes in—		
Edmonton .....	20	
Calgary .....	89	
	<hr/>	109
<i>Youth Training Programme:</i>		
Number of schools .....	12	
Number of staff members .....	14	
Total attendance at schools .....		646
<i>Publications.</i>		
Press Bulletins:		
Number of issues .....	1	
Circulation .....		5,500
Agricultural Publications:		
Number sent out during the year .....		12,210
Number of individual requests received .....	1,700	
Total number of bulletins distributed since inception of service .....		336,913

## *Fine Arts.*

### *Drama:*

Number of three-day week-end schools held .....	4	
Number of short courses to Youth Training Schools .....	5	
Approximate attendance at week-end schools .....		125
Number of adjudications at Festivals .....	11	
Attendance at adjudications at Festivals .....		2,000
Enrolment at Banff School of Fine Arts .....	266	
Enrolment at Edmonton Music Course .....	19	
	—	285

### *Art:*

Enrolment at Art short course, Lethbridge .....		14
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### *Alberta School of Community Life.*

Enrolment at Olds .....	68	
Enrolment at Gooseberry Lake .....	330	
Enrolment at Lake Saskatoon .....	61	
	—	459

### *Canadian Legion Educational Services.*

Registrations in Correspondence Courses .....		2,400
Number of military establishments .....	24	
Number of tutorial classes held .....	14	
Number in attendance at tutorial classes .....		700

### *Recapitulation.*

Total aggregate attendance at lectures, radio listening groups, lantern lectures, film-slide shows, moving picture programmes, National Film Board programmes, conferences (University Week for Farm Young People, Refresher Course in Municipal Administration, Co-op. short course), Study groups, W.E.A. classes, Youth Training Schools, Drama short courses and adjudications at Festivals, Banff School of Fine Arts, Lethbridge Art Course, Alberta School of Community Life, Canadian Legion Educational Services .....	685,123
Total circulation of books, travelling libraries, package libraries, plays, periodicals, study group lessons .....	31,474
Total circulation of Press bulletins and Agricultural publications .....	17,710

NOTE: The statistics do not mean separate individuals, as a great many people receive more than one service from the Department.

### *Conclusion.*

This concludes the 29th report of the Department of Extension. It marks a solid year of achievement, and at the same time points the way to the future. As the struggle for a free society goes forward in the maelstrom of world war, two things stand out among others with respect to education. One is that the education required to assure the success of economic and political democracy is that which is intimately related to action for social purposes; the other is that the educative process must be made available to all of the people wherever they may be. In other words, the University of the future will only have strength to the degree in which it becomes a living force in the minds and hearts of the people who are its constituents.

## Report of the Acting Director of the Provincial Laboratory, Dr. J. J. Ower

January, 1941, to December, 1941

I have the honor to submit the following report of the work performed in the Provincial Laboratory for the year 1941. During this period the total number of examinations, as is its wont, moved considerably upward, being higher than in 1940 by some 11,500 examinations.

As anticipated in the last annual report, a special statement in considerable detail discussing working conditions in the Laboratory was submitted to the Survey Committee, and it is not proposed to further enlarge upon the matter here except to note that the amount of work requested continues to increase in a more or less regular way. During this period the pathological routine became so heavy that it was not possible physically to carry it on with the staff available, and it was found necessary to request the Department of Health to suspend temporarily the regulation requiring the routine submission for examination of all material removed at surgical operations in hospitals throughout the Province. A diagnostic service for all materials which the various hospital staffs wish to have examined has been substituted.

The numbers of blood tests performed (40,000) increased about twenty per cent over the previous year due to requests from the various military services for large numbers of these examinations. The increase in the number of these tests has thrown such a load on the serological staff that an attempt is being made to secure assistance from the Dominion Government, whose responsibility this work would seem to be.

The report of the University Survey Committee recognized the need for expansion of the Laboratory and recommended favorably on the request for consideration in this matter.

In July, 1941, Dr. J. A. Romeyn was appointed to the staff as Assistant in Bacteriology as a replacement in view of the absence of the Director, Lt.-Col. A. C. Rankin, C.M.G., on active service.

The heavy enlistment of young medical graduates into the military medical services has caused a more or less complete scarcity of internes, and the problem of obtaining junior staff members is becoming increasingly difficult without much hope of relief during the war period.

In conclusion, I would like to pay a tribute to the splendid *esprit de corps* of the staff of the Laboratory who continue to carry on efficiently in crowded quarters with a considerable amount of unavoidable overtime.

The following table covers some of the details of the year's work:

### *Commercial Value of Work if Minimum Charge Were Made, 1941*

Sputum .....	622	\$ 1.00	\$ 622.00
Diphtheria .....	1,435	1.00	1,435.00
Typhoid Fever .....	593	1.00	593.00
Milks .....	1,399	3.00	4,197.00
Waters .....	2,687	10.00	26,870.00
Miscellaneous Examinations .....	3,700	3.00	11,100.00
Mothers' Milk .....	2	2.00	4.00
Urinalysis .....	406	3.00	1,218.00
Medico-Legal Examinations .....	6	5.00	30.00
Bloods for Wassermann Test .....	40,475	3.50	141,662.50
Smears for the Gonococcus .....	8,281	1.00	8,281.00
Van Der Bergh Determination .....	2,080	1.00	2,080.00

Pathological Histological Material . . . . .	9,638	5.00	48,190.00
Blood Smear Examinations . . . . .	105	2.00	210.00
Ascheim Zondek Test . . . . .	248	5.00	1,240.00
Cerebro-Spinal Fluid Examinations . . . . .	2,278	2.00	4,556.00
Post-mortem Examinations (Bact.) . . . . .	127	5.00	635.00
B. Abortus Examinations . . . . .	593	1.00	593.00
B. Tularensis . . . . .	593	1.00	593.00
Typhoid Vaccine (10 c.c. quantity) . . . . .	739	.25	184.75
Autogenous Vaccine (25 c.c. quantity) . . . . .	23	5.00	115.00
Poliomyelitis Serum (20 c.c. quantity) . . . . .	151	2.50	377.50
Stock Vaccine (25 c.c. quantity) . . . . .	7	5.00	35.00
Total . . . . .			<hr/> \$254,821.75
Cattle Blood Examinations . . . . .	2,311	.10	231.10
			<hr/> \$255,052.85

### Report of the Director of the Industrial Laboratories, Mr. James A. Kelso

In all 4,318 examinations and analyses of various substances were carried out during the year.

The usual court evidence was given in many cases under Provincial and Dominion acts, and a great amount of time was spent in consultation and investigations of criminal cases for the R.C.M.P. Investigations were carried out for various governmental departments, such as Trade and Industry, Marketing Board, Provincial Secretary, Attorney General, Liquor Control Board, etc., the latter requiring survey analyses of malt liquors sold, inspection of sterilizers used at all Alberta hotels, and inspection of breweries. A special investigation was carried out for the Workmen's Compensation Board of silicosis at a cement plant at Exshaw, necessitating a trip to Exshaw and examination of many samples of shale and dust as to composition and free silica content, the latter being done in conjunction with the United States Department of Mines, Washington.

Whenever required, assistance was given to Dominion war departments, particularly on water surveys, concrete construction, oil testing, and aircraft repair. Analyses were made for several University departments, and control work was handled for the power plant.

Analyses for possible poisons are required on organs from many post-mortems, and on brain tissue to determine the state of intoxication, such examinations being very lengthy and requiring much overtime.

Tests of construction material and electrical goods were done in conjunction with the departments of Civil and Electrical Engineering.

LIBRARY OF THE UNIVERSITY  
OF ALBERTA

UNIVERSITY OF ALBERTA

LIBRARY ARCHIVE



REPORT  
OF THE  
BOARD OF GOVERNORS  
AND  
THE PRESIDENT  
OF THE  
UNIVERSITY OF ALBERTA  
1942-43







REPORT  
OF THE  
BOARD OF GOVERNORS  
AND  
THE PRESIDENT  
OF THE  
UNIVERSITY OF ALBERTA  
1942-43



*To the Lieutenant Governor in Council.*

SIR:

On behalf of The Governors of the University of Alberta, and in accordance with section 28, of an Act respecting the University of Alberta, the undersigned have the honour to transmit through the Minister of Education the Report of the University of Alberta, setting forth the revenues and expenditures for the year ending March 31st, 1943, and the investments as they stood at the end of the fiscal year.

Appended to this report is the Report of the President of the University, in which the academic work of the University for the year, July 1st, 1942, to June 30th, 1943, is dealt with in detail.

H. H. PARLEE, *Chairman.*

ROBERT NEWTON, *President.*



# Financial Statement

## UNIVERSITY OF ALBERTA BALANCE SHEET AS AT MARCH 31, 1943

### ASSETS

#### FIXED:

Buildings and equipment in service:		
Land, buildings and plant .....	\$3,879,135.57	
Furnishings and equipment .....	895,817.51	
		\$4,774,995.08

#### CURRENT:

Cash on hand and in transit .....	\$ 5,034.19	
Imperial Bank of Canada .....	7,105.77	
Accounts and fees receivable .....	\$ 88,990.25	
Less: Reserve for uncollectible accounts .....	2,500.00	
	86,490.25	
Interest accrued .....	1,562.50	
Inventories .....	40,237.18	
		140,429.89

#### PREPAYMENTS:

Insurance unexpired .....	\$ 627.21	
Sundry .....	84.78	
		711.99

#### OTHER ASSETS:

Livestock inventory .....	\$ 31,339.00	
Deposit, Workmen's Compensation Board .....	5,754.19	
		37,093.19

#### DEFERRED EXPENSES:

Bond discount .....		198,392.25
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#### TRUST:

	Par Value	Book Value	
Investments:			
Dominion of Canada debentures ....	\$ 9,700.00	\$ 9,832.82	
Province of Alberta debentures .....	660,600.00	653,287.88	
Province of Alberta debentures, past due .....	13,200.00	13,197.50	
Province of Alberta guaranteed debentures .....	7,000.00	7,000.00	
Province of Alberta savings certifi- cates, past due .....	4,500.00	4,500.00	
Other bonds and shares .....	12,246.66	12,246.66	
	<u>\$707,246.66</u>	<u>\$ 700,064.86</u>	
Cash on hand .....		7,326.55	
Imperial Bank of Canada .....		138,725.38	
Mortgages receivable .....		31,310.21	
Loans receivable .....		2,271.80	
Real estate and shares, nominal value .....		17.00	
			879,715.80
			<u>\$6,031,298.20</u>



## LIABILITIES

### CAPITAL AND SURPLUS:

Advanced by the Government of the Province of Alberta .....	\$4,804,342.19	
Surplus:		
Capital surplus .....	\$202,646.19	
Less: Equipment replaced and abandoned .....	28,194.50	
	<u>\$174,451.69</u>	
Deduct: Revenue deficit as per Statement .....	25,968.00	
		<u>148,483.69</u>
		\$4,952,825.88

### CURRENT:

Treasury Branch overdraft .....	\$ 1,037.06	
Imperial Bank of Canada, loan .....	27,000.00	
Accounts payable .....	46,715.57	
Provision for uncompleted building and repairs .....	6,500.00	
		<u>81,252.63</u>

### DEFERRED INCOME:

Fees .....	\$ 32,517.85	
Accelerated courses—Department of Labour .....	5,000.00	
		<u>37,517.85</u>

### RESERVES:

Wartime adjustments .....	\$ 24,375.96	
Premium on Rockefeller grant .....	18,221.66	
Unexpended library fees and donations .....	11,251.94	
Cafeteria building fund .....	10,000.00	
Repairs and replacements .....	9,800.00	
Workmen's Compensation Board .....	6,336.48	
		<u>79,986.04</u>

### TRUST:

Rockefeller Foundation .....	\$ 500,000.00	
Escheated estates .....	175,962.64	
Supplementary annuity fund .....	49,124.44	
Sundry endowments, bequests and scholarship grants, amounts administered or held for affiliated organizations and others .....	156,628.72	
		<u>879,715.80</u>
		<u>\$6,031,298.20</u>

Edmonton, Alberta, August 18, 1943.

I have audited the books and records of the University of Alberta for the year ended March 31, 1943.

Land, buildings, plant, furnishings and equipment are shown at original cost without provision for depreciation except an amount of \$9,800.00 which has been set aside to provide for repairs and eventual replacement of equipment which is not available at the present time. University officials are of the opinion that the value of furnishings and equipment has been maintained by additions and renewals from revenue.

Trust investments include Province of Alberta past due debentures and savings certificates of a par value of \$17,700.00. Interest on Province of Alberta direct and guaranteed issues was received at the reduced rates tendered by the Province.

Principal repayments on mortgages were in arrears \$8,299.21 as at March 31, 1943.

Subject to the foregoing remarks, I certify that, in my opinion, the above Balance Sheet is properly drawn up so as to show the financial position of the University of Alberta as at March 31, 1943, according to information and explanations given to me and as shown by the books of the University, and the accompanying Statement of Revenue and Expenditure correctly sets forth the result of operations for the year ended at that date.

C. K. HUCKVALE, C.A.,

Provincial Auditor.

UNIVERSITY OF ALBERTA  
STATEMENT OF REVENUE AND EXPENDITURE  
FOR THE YEAR ENDED MARCH 31, 1943

REVENUE

Grants:			
Province of Alberta:			
General .....	\$	500,000.00	
Debt charges, see contra .....		135,432.02	
	\$	635,432.02	
Dominion of Canada:			
Accelerated courses .....		2,000.00	
			\$ 637,432.02
Rockefeller Foundation .....			12,500.00
Fees, net revenue:			
General .....	\$	218,730.82	
Summer school .....		2,653.92	
Examinations .....		7,587.73	
			228,972.47
✓ Library fees, see contra .....			8,050.99
Operating departments net revenue .....			35,893.12
	\$		922,848.60

EXPENDITURE

Instructional salaries and direct expenses, net .....	\$	540,891.70	
Public service departments net expenditure .....		79,894.96	
Upkeep of buildings .....		75,935.00	
Administrative salaries and expenses .....		41,583.96	
✓ Library salaries and expenses .....		15,351.74	
Pensions .....		5,757.85	
Physical education .....		3,561.17	
Calendar and scientific publications .....		3,144.25	
Provost's office .....		1,630.86	
Sundry .....		977.85	
Provision for library extension, see contra .....		8,050.99	
	\$	776,780.33	
Debt charges, see contra .....		135,432.02	
	\$		912,212.35
Excess of revenue over expenditure for the year ended March 31, 1943 .....	\$		10,636.25

DEFICIT ACCOUNT

AS AT MARCH 31, 1943

Deficit as at March 31, 1942 .....	\$	28,854.73	
Add:			
Rink rentals, 1941-42, transferred to reserve for repairs and re- placements .....		2,400.00	
Dining room profit, 1941-42, transferred to reserve for wartime adjustments .....		9,808.56	
	\$	41,063.29	
Deduct:			
Trust balances transferred .....	\$	2,223.53	
Sundry adjustments of previous years' transactions, net .....		2,235.51	
Excess of revenue over expenditure for the year ended March 31, 1943 .....		10,636.25	
			15,095.29
Deficit as at March 31, 1943 .....	\$		25,968.00

## APPENDIX

### THE REPORT OF THE PRESIDENT

*To the Board of Governors  
of the University of Alberta.*

GENTLEMEN:

I have the honour to submit the following report on the work of the University of Alberta for the year ending June 30, 1943.

ROBERT NEWTON,  
*President.*

## The Report of the President

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On completion of the fourth wartime session, covering a period not far short of the duration of the First Great War, it is of interest to examine the effect the war has had on the numbers of students in attendance.

The over-all decrease has been less than expected. Beginning with a registration of 2,327 in 1939-40, the figures for succeeding years have been 2,254, 2,045, 2,015. (The last figure includes half of the 151 medical students and 45 dental students who began the current accelerated session at February 1, 1943. The other half will be credited to the registration of 1943-44.) Using the figures for 1939-40 as a base, the cumulative percentage decreases in the next three years were 3.1, 12.1, and 13.8. These compare with a drop of 30% by the third year of the First Great War, with some recovery in the fourth year.

The smaller drop in the Second Great War reflects its highly technical character. There are very few places in the war effort which can be filled satisfactorily by men or women lacking technical training of one kind or another.

The University of Alberta has contributed not only its graduates, but also undergraduates in large numbers as soon as they reached a stage of training which equipped them for some branch of war service. This University has also carried its full share of special courses for the training of enlisted personnel. These have included courses of about 16 weeks duration for R.C.A.F. mechanics, R.C.N. electrical artificers, and R.C.N. radio artificers. The students in these courses were not counted in the registration figures just given, but as they were all fully matriculated students, we would be justified in including them. There were 185 such students in 1941-42, and 406 in 1942-43. Strictly speaking, we should divide these numbers in two before adding them to the registration figures for the years concerned, as the courses were little more than half the length of a normal university session. Even so, they compensate for most of the wartime loss in registration of regular students.

**Table I.—R.C.A.F. and R.C.N. Courses at the University of  
Alberta, 1941-43**

<i>First Radio Mechanics Course, R.C.A.F.</i>	
June 2, 1941-September 10, 1941.....	120 men for 14 weeks
<i>Second Radio Mechanics Course, R.C.A.F.</i>	
March 23, 1942-July 17, 1942.....	65 men for 16½ weeks
	185 in 1941-42
<i>Third Radio Mechanics Course, R.C.A.F.</i>	
July 27, 1942-November 20, 1942 .....	75 men for 16½ weeks
<i>First Electrical Artificers Course, R.C.N.</i>	
May 15, 1942-August 31, 1942 .....	100 men for 15½ weeks

*Extended E.A. Course, R.C.N.*

August 31, 1942-October 2, 1942 ..... 25 men\* for 4½ weeks

*Second Electrical Artificers Course, R.C.N.*

October 5, 1942-January 30, 1943.....64 men for 16½ weeks

*Third Electrical Artificers Course, R.C.N.*

February 1, 1943-May 22, 1943 .....64 men for 16 weeks

*First Radio Artificers Course, R.C.N.*

November 30, 1942-March 20, 1943 .....53 men for 16 weeks

*Second Radio Artificers Course, R.C.N.*

March 29, 1943-July 16, 1943.....50 men for 16 weeks

406 in 1942-43

\*Duplicates of those in immediately preceding course, hence not included in total.

The R.C.N. courses, which are unique to this University, are expected to continue for the duration of the war, and next September we and a number of other Canadian universities will begin an Army University course of 33 weeks duration. This will be for enlisted men training as potential officer material. The curriculum will be essentially that of first year engineering, and the students will receive a year's university credit on their return after the war. Meanwhile, these favoured 60 students will have the privilege of beginning their University course with all fees paid, everything found, and army pay.

The increasing number of these Service courses marks a trend towards the development of the universities as technical training centres for the Armed Forces. This is as it should be, since it permits in effect double use of the technical staff and equipment of the universities.

If we look now at the effect of the war on the numbers of students in different faculties and schools we shall find further evidence of its emphasis on technical training. The following table is incomplete, but sufficient to bring out the point in question:

	1939-40	1942-42
Total registration .....	2,327	2,005
(Excluding R.C.A.F. and R.C.N.)		
Arts and Science:		
B.A. ....	258	118
B.Sc. ....	196	177
Commerce .....	96	51
Household Economics .....	96	99
Combined Courses .....	137	128
Applied Science (Engineering) .....	300	367
Agriculture .....	146	81
Law .....	59	28
Medicine .....	195 (a)	235 (b)
Dentistry .....	57 (a)	72 (b)
Pharmacy .....	59	33
Nursing .....	146	146

(a) After deducting the number now classified as pre-medical or pre-dental.

(b) Including half the students in session of Feb.-Aug., 1943.

Education .....	33	111(c)
Graduate Students .....	129	80

(c) About a third of this number should be credited to Arts and Science on the basis of organization existing in 1939-40.

It is clear the groups hardest hit are Arts (B.A.), Commerce, Agriculture, Law, Pharmacy, and Graduate Students. That this situation is likely to continue is emphasized by the comparative figures for first-year registration:

	1939-40	1942-43
Arts (B.A.) .....	116	36
Commerce .....	35	24
Agriculture .....	69	26
Law .....	15	4
Pharmacy .....	26	6

Of the foregoing five groups, only Agriculture is officially classified by National Selective Service as "technical personnel", and therefore not permitted to enlist without the approval of the Wartime Bureau of Technical Personnel. With regard to the others, Dominion Government policy for the time being is not to call them so long as they are making good progress with their studies. Even in wartime we cannot afford to discontinue entirely the education of students in the liberal arts. Such a hiatus might easily prove disastrous in the post-war period. But all Canadian universities have pledged themselves to report to Regional Mobilization Boards after each examination period those students who have failed to pass.

Students in Pharmacy have not benefitted fully from the general policy of deferment, being subject to draft during their apprenticeship period. Under the present interpretation of the law, it is hard to see how any but those physically unfit for war service can hope to graduate into this profession.

As far as graduate students are concerned, only those undertaking studies in the national interest or in aid of the successful prosecution of the war are permitted to continue. The fact that they still numbered 80 is evidence of the large amount of activity in support of the war under way in this University. Most of them are acting either as demonstrators in the Service courses or as assistants to professors engaged in war research.

Engineering students, on the other hand, have increased substantially in number, whether considered on the basis of total registration (367 as compared with 300 in 1939-40) or of first-year students (181 against 124). This is an engineer's war. The Dominion Government co-operates with the Provincial Government in making grants available to needy students in engineering and science. Many of these students under present conditions also have opportunity to secure more lucrative summer employment than in ordinary times.

Needy students in Medicine and Dentistry have for the most part been cared for by grants from the Kellogg Foundation, or by the opportunity to enlist and draw army pay and allowances in their two last years. The Dominion Government also makes a grant to the University to help cover the extra expense of maintaining the courses in Medicine and Dentistry all the year round.

One last point in regard to student numbers is of interest, namely, that there has been no notable change in the over-all ratio of men to women students. This still remains over two to one. The registration of women, no less than of men,



has been cut by enlistment in the armed forces and other war activities. In this war, more than ever, women are bearing their full share of the burden.

We have now on the Campus student units of all three of the Armed Services. The C.O.T.C. dates back to the First Great War, and for the first three years of this war enrolled all physically fit men students. Beginning with the session just ended, with the approval of the District Officer Commanding, we adopted a policy of requiring only two years basic training (including two spring camps) of men students other than those who wished to apply for commissions. A third year of basic training becomes needlessly repetitious, and its omission enabled students preparing themselves for engineering or other civilian professions essential to the war effort to devote their senior years entirely to their professional training. The change increased the efficiency and improved the morale of the student body. Naturally it decreased the enrollment in our unit of the C.O.T.C., which began the year with 480 members as compared with 985 last year. Another cause of the decrease in the size of the C.O.T.C. was the organization at the beginning of the session of the University Air Training Corps, with an initial enrollment of 185 in our Squadron. Shortly before the end of the session, in co-operation with the R.C.N., we organized a University Naval Training Division with 44 members. These are enlisted in the R.C.N.V.R., and on completion of their university course will go on active service, except as they may be rejected on grounds of fitness, or withdrawn by the Warime Burueau of Technical Personnel for more urgent needs in war industry. This new unit did not attempt any training within the University this spring, but after examinations had a week aboard H.M.C.S. Nonsuch, followed by the regular two-week camp period common to all university Service units. Thus all three Services now share equally the opportunity of using the University as a recruiting and preliminary training ground for potential officer material.

Women's war service training, begun on a voluntary basis in 1941-42, was during the past session made compulsory to the extent of 60 hours for those physically fit. The change was made at the request of the women students themselves, to simplify administration. Courses were offered in first aid, A.R.P., signalling, social service, precision instruments, clerical work, Red Cross, and canteen work, together with drill and physical education for first year students.

The number of University personnel on active service continues to grow as the war progresses. We have not been able to get a complete record, especially of the graduates who have enlisted, but these are the numbers of which we have knowledge:

	Men	Women	Total
Academic staff .....	24	1	25
Administrative staff .....	9	.....	9
Graduates .....	896	43	939
Undergraduates .....	381	5	386

The figures for undergraduates do not include students in Medicine, Dentistry, and Engineering who are now in the army, but who, by army arrangement, still attend the University to complete their courses before reporting for active service. Neither do these figures include the 44 students in the University Naval Training Division, who are definitely enlisted for active service. Nor, of course, do they include some hundreds in the C.O.T.C. and Air Training Corps, who are looking

forward to active service, though their final attestation has not yet taken place. Unfortunately we must add 43 casualties, of whom 30 were killed in action, 5 are missing, and 8 are prisoners of war.

Requests to the University for technical personnel have far surpassed our capacity to comply. There are two especially notable instances. First, northern developments have created a virtually unlimited demand for engineers, both graduate and undergraduate, and a subsidiary demand for geologists. Second, the Air Force has been particularly energetic in improving the dietary standards of its members, and has gathered in for this purpose all the trained dietitians available. Moreover, the Air Force has established, in co-operation with four universities, of which we are one, nutrition laboratories for the testing of foods supplied to its units in those areas. The number of *in absentia* degrees awarded at this Convocation further reflects the urgency of the manpower demand.

Since I have mentioned laboratory services to the Armed Forces, I shall add here that the Provincial Laboratory of Public Health, operating as a unit of the University, has made during the last twelve months 27,035 biological tests for local units of the Canadian and American armies. When we remember that all this is added to their regular services to hospitals and physicians throughout Alberta, we must take off our hats to a devoted staff working long hours in unbelievably cramped quarters.

The twelfth annual Refresher Course, organized earlier this month in co-operation with the Alberta Division of the Canadian Medical Association, this year took on a decidedly military and international aspect. There were in attendance 78 medical officers of the R.C.A.M.C., 62 of the R.C.A.F., 2 of the R.C.N.V.R., 6 of the United States Medical Corps, and 60 civilian doctors from outside the city of Edmonton. Staff were also supplied by all of these groups and, I should add in grateful acknowledgement, entirely without expense to the University.

Refresher courses such as the foregoing are becoming an increasingly common feature of modern education. Science and knowledge generally are progressing so rapidly that every professional man must remain a student all his days, under penalty of becoming a back number. Indeed, the same thing is true in a measure of every citizen, with the growing complexity and ever-changing nature of the personal, social, and civic problems he has to face. Hence the growing importance of adult education, which it is the special care of our Department of Extension to promote. A great variety of courses, ranging from the tenth annual session of the Banff School of Fine Arts to the twenty-fourth annual Farm Young People's Week, were held during the year. Counting services of all kinds, the Department touched the lives of no less than 1,128,202 persons, an increase of 443,079 over last year. The figure for this year includes 3,006 Service personnel taking courses organized by the Canadian Legion Educational Services through our Department of Extension.

The Faculty of Education has just completed very successfully its first session with the status of an independent faculty. The year's activities included a special accelerated course in the summer of 1942, with an enrollment of 34 students; also the organization, in co-operation with the Edmonton Board of School Trustees, of the University High School, where our teachers-in-training have opportunity to do much of their practical work.

The University Observatory, built with a grant from the Carnegie Corporation Research Fund to house the 12.5-inch reflecting telescope constructed and donated

to the University by Mr. C. G. Wates, as well as to provide better mounting for the University's four-inch refracting telescope, zenith telescope, and transit instrument, is now complete and was formally opened on May 20, 1943, by Dr. J. A. Pearce, Director of the Dominion Astrophysical Observatory at Victoria, B.C. It will be a valuable asset to our own staff and students, and to members of the Edmonton Centre of the Royal Astronomical Society of Canada.

The University needs friends. While few may have the funds to endow scholarships, or the practical genius that enable Mr. Wates to contribute an important work of his own hands, many have indicated a desire to help in some way. Out of this came a spontaneous movement during the past year to set up an organization known as the Friends of the University. The members pledge an annual contribution to a fund to be used in getting little extras which increase the interest and efficiency of the work of the University staff.

The Alumni should be natural friends of the University. But they need continuing contact with, and information about, their Alma Mater, in order to maintain their interest. To meet this need in some degree there was launched during the past year a quarterly magazine published jointly by the University and the Alumni Association, known as *The New Trail*. This is a continuation, on an enlarged scale and a more regular schedule, of *The Trail*, which the Alumni Association has published hitherto about once a year. It is intended to be a subscription magazine, but was sent free to all Alumni during the first year.

The problem of securing living accommodation for students in the forthcoming summer and fall sessions is giving us a great deal of concern. When the residence halls were turned over to the R.C.A.F. two years ago we did not foresee the benign "American invasion" which has overtaxed the city's housing capacity. We must depend in increasing measure upon the goodwill and patriotic spirit of Edmonton citizens to open their homes to our students.

We are already giving serious thought to the problem of accommodating the probable rush of returning students at the conclusion of the war. With existing buildings overcrowded, and inevitable delays to face in the construction of new buildings, various schemes for year-round operation and for double-shift instruction are under study by special committees.

Another step in preparation for post-war reconstruction, in which the University is involved, was the re-establishment this year of the Research Council of Alberta as the research arm of the Provincial Government. The Council has its headquarters in the University. The University is also represented on the recently organized Provincial Post-War Reconstruction Committee. These are proper and useful contacts, enabling the University to help with its technical knowledge and equipment the adjustment of this Province to post-war conditions.

In closing, I should like to pay tribute to the continued loyal service of the University staff, many of them carrying greatly augmented loads of teaching and other responsibilities arising out of war conditions. I should add that, notwithstanding fixed salaries and increasing taxation, the staff handsomely exceeded their quota in the Fourth Victory Loan. The students, too, have carried extra loads, in particular the weight of service training added to their usual curriculum, and the requirement to meet higher academic standards as the price of continuing their studies in wartime. It is the spirit of the staff and students that makes a university.

I feel entirely justified in using the familiar phrase, "The spirit of the troops is excellent".

Data concerning staff numbers, appointments, and resignations; student registration; gifts, scholarships, and prizes; staff publications; as well as the reports of the Deans, Directors, Librarian, and Provost follow.

### Staff Numbers

The following are statistics with reference to the academic staff during the year:

#### *Full-Time Teaching Staff:*

Professors .....	51	
Associate Professors .....	13	
Assistant Professors .....	9	
Lecturers .....	30	
Instructors .....	8	
Demonstrators and Assistants .....	7	
	—	118
On leave for war service:		
Professors .....	3	
Associate Professors .....	1	
Assistant Professors .....	1	
Lecturers .....	5	
Instructors .....	1	

#### *Part-Time Teaching Staff:*

Professors .....	15	
Associate Professors .....	4	
Assistant Professors .....	11	
Lecturers .....	20	
Instructors .....	42	
Demonstrators and Assistants .....	31	
Student Assistants .....	120	
	—	243
On leave for war service:		
Assistant Professors .....	1	
Lecturers .....	1	
Instructors .....	8	
Demonstrators .....	4	

#### *Library:*

Librarian .....	1	
Assistants .....	9*	
Sessional Help .....	6	
	—	16

\*2 on leave for war service.

#### *Department of Extension:*

Director .....	1	
Assistant .....	1	
Dramatic Secretary .....	1	
Librarian .....	1	
Assistant Librarian .....	1	
	—	5

*Department of Physical Education:*

Director .....	1*	
Instructor .....	1	
	—	2

\*On leave for war service.

*Departmental of Industrial Research:*

Research Professor .....	1	
Assistant Research Professor .....	1	
Chemist .....	1	
Assistant Chemists .....	2	
	—	5

*Industrial Laboratory:*

Director .....	1	
Assistant .....	1	
	—	2
Total.....		391

**Staff Appointments and Promotions**

*Faculty of Agriculture:*

- Robert David Sinclair, B.S.A., M.S., Ph.D., Dean, Faculty of Agriculture.  
Ralph Elmer Carlyle, M.Sc., Ph.D., Reinstated as Sessional Lecturer in Soils  
on discharge from Army.  
Albert Stephen Ward, B.S.A., M.Sc., Acting Lecturer in Soils.  
John Hugh Brown, B.Sc., M.Sc., Sessional Lecturer in Entomology.  
Walter Lewis Dunkley, B.Sc., M.Sc., Sessional Assistant in Dairying.

*Faculty of Applied Science:*

- Alex. R. Greig, B.Sc., Sessional Professor of Mechanical Engineering.  
Wilfred Ernest Cornish, B.Sc., M.Sc., from Assistant Professor to Associate  
Professor of Electrical Engineering, and Acting Head of the Department of  
Electrical Engineering.  
Robert McDonald Hardy, B.Sc., M.Sc., D.L.S., A.L.S., S.L.S., from Assistant  
Professor to Associate Professor of Civil Engineering.  
John Wardlaw Porteous, M.Sc., from Lecturer to Assistant Professor of Elec-  
trical Engineering.  
John Henry Waghorne, B.Sc., M.Sc., Lecturer in Electrical Engineering.  
Ronald Edward Phillips, B.Sc., Lecturer in Electrical Engineering.  
Dudley Blair Menzies, B.Sc., S.M., Special Lecturer in Sanitary Engineering.  
Leslie Harold McManus, B.Sc., Sessional Lecturer in Highway Engineering.  
Frederick McPherson, B.Sc., from Demonstrator to Instructor in Civil Engi-  
neering.  
Elio D'Appolonia, B.Sc., Sessional Demonstrator in Civil Engineering.  
Richard Llewelyn Davies, B.Sc., Sessional Demonstrator in Civil Engineering.  
George Ford, B.Sc., Sessional Demonstrator in Civil Engineering.  
Ralph Norman McManus, B.Sc., Sessional Demonstrator in Civil Engineering.

*Faculty of Arts and Science:*

- Reuben Benjaiman Sandin, M.Sc., Ph.D., from Associate Professor to Professor  
of Chemistry.



Edward Herbert Boomer, B.Sc., M.Sc., Ph.D., F.C.I.C., F.R.S.C., from Associate Professor to Professor of Chemical Engineering.  
 Lawrence Howard Nichols, B.A., M.A., F.R.M.S., from Assistant Professor to Associate Professor of Physics.  
 Frederick Millet Salter, B.A., M.A., from Assistant Professor to Associate Professor of English.  
 Albert Louis Cru, A.M., B.-es-L., Sessional Professor of French.  
 Mary Willan Winspear, B.A., M.A., Ph.D., Lecturer in English and Adviser to Women Students.  
 Stuart George Davis, B.Sc., M.Sc., Ph.D., from Instructor to Lecturer in Chemistry.  
 Donald Burton Scott, B.A., Ph.D., from Instructor to Sessional Lecturer in Physics.  
 Hermon Reginald Milley, B.A., M.A., Instructor in Physics.  
 Mary Helena Faunt, B.A., Sessional Instructor in French.  
 Norman Edward Perkins, B.Sc., M.Sc., Sessional Instructor in Chemistry.  
 Margaret Nancy Davis, B.A., Essay Reader in English.

*School of Commerce:*

Gordon Skinner, C.A., Sessional Instructor in Accounting.  
 Clem Livingstone King, B.Com., C.A., Instructor in Accounting and Accountant in Bursar's Office.

*School of Household Economics:*

Muriel E. M. Richards, B.Sc., Instructor in Household Economics.

*Faculty of Education:*

Kenneth Farnam Argue, B.A., M.A., D.Ed., from Assistant Professor to Associate Professor of Education.

*Faculty of Law:*

Malcolm Murray MacIntyre, B.A., LL.B., LL.M., S.J.D., from Associate Professor to Professor of Law, and Dean of the Faculty of Law.  
 George Hobson Steer, K.C., M.A., from Sessional Lecturer to Professor of Law.  
 William George Auxier, B.A., LL.B., Sessional Instructor in Law.  
 Carleton William Clement, K.C., B.A., LL.B., Sessional Instructor in Law.  
 Edward William Scott Kane, B.A., LL.B., Sessional Instructor in Law.  
 William Alexander McGillivray, B.A., LL.B., Sessional Instructor in Law.  
 Alfred Thomas McLean, B.A., LL.B., Sessional Instructor in Law.  
 Frank Jost Newson, B.A., LL.B., Sessional Instructor in Law.  
 Alexander Smith, B.A., LL.B., Sessional Instructor in Law.  
 Sydney Bruce Smith, K.C., B.A., Sessional Instructor in Law.

*Faculty of Medicine:*

John Ross Vant, B.A., M.D., M.C.O.G., from Associate Professor to Professor of Obstetrics and Gynaecology.  
 Jermyn Oscar Baker, M.D., C.M., F.A.C.S., F.R.C.S., M.C.O.G., from Associate Professor to Professor of Obstetrics and Gynaecology.  
 Mark Robert Levey, M.D., C.M., D.L.O., from Clinical Professor to Professor of Ophthalmology and Rhino-Oto-Laryngology.



Walter Hepburn Scott, M.D., C.M., F.R.C.P., from Assistant Professor to Clinical Professor of Medicine.

John William Scott, M.D., C.M., F.R.C.P., F.A.C.P., from Assistant Professor to Associate Professor of Clinical Medicine.

Randall Roberts MacLean, M.D., from Lecturer to Assistant Professor of Psychiatry.

Percy Harry Sprague, M.D., M.Sc., F.A.C.P., from Sessional Demonstrator to Assistant Professor of Clinical Medicine.

Kenneth Hamilton, B.A., B.A., M.B.B.Ch., F.R.C.P., M.R.C.P., from Lecturer to Assistant Professor of Clinical Medicine.

Allan Day, M.B., from Lecturer to Assistant Professor of Obstetrics and Gynaecology.

Jules Tuba, M.Sc., Ph.D., Lecturer in Biochemistry.

Roy Llewellyn Anderson, M.D., F.R.C.S., F.A.C.S., from Demonstrator to Lecturer in Clinical Surgery.

George Meldrum Little, M.D., D.P.H., from Instructor to Lecturer in Public Health.

Nesbitt Edgar Alexander, M.D., F.A.C.S., from Demonstrator to Lecturer in Clinical Surgery.

Eardley Samuel Allin, B.Sc., M.D., F.R.C.S., from Demonstrator to Assistant Instructor in Clinical Surgery.

William Worth Eadie, M.D., from Demonstrator to Assistant Instructor in Clinical Surgery.

John Orobko, M.D., C.M., F.A.C.S., from Demonstrator to Assistant Instructor in Clinical Surgery.

Leonard Christopher Harris, M.D., C.M., Instructor in Clinical Medicine.

Glen Ross Davison, M.D., C.M., from Demonstrator to Instructor in Clinical Medicine.

James Ernest Carmichael, B.Sc., M.D., C.M., from Demonstrator to Instructor in Anaesthesia.

Ronald Hilborn Horner, M.D., Instructor in Obstetrics and Gynaecology.

Walter Stirling Anderson, B.Sc., M.D. M.S., F.R.C.S., from Assistant Demonstrator to Assistant Instructor in Clinical Surgery.

Georges Philippe Fortier, B.A., M.D., from Demonstrator to Assistant Instructor in Pathology.

Gordon Irving Beil, B.Sc., M.D., Assistant Demonstrator in Clinical Medicine.

Joseph Bogue MacKay, M.B., Ch.B., Assistant Demonstrator in Clinical Medicine.

Donald Robert Wilson, B.A., M.D., C.M., Sessional Assistant in Clinical Medicine.

#### *School of Dentistry:*

William Scott Hamilton, L.D.S., D.D.S., Director, School of Dentistry.

Whitmore Pipes Calhoun, B.A., D.D.S., Lecturer in Dental Anatomy and Operative Dentistry.

Reyburn R. McIntyre, L.D.S., D.D.S., Lecturer in Orthodontia.

James Cecil Ward, L.D.S., D.D.S., Lecturer in Pathology and Radiology.

Philip J. Kendal, D.D.S., Instructor in Operative Dentistry.

Frederick Stanley Colman, D.D.S., from Demonstrator to Instructor in Prosthetic Dentistry.

George York Barnett, L.D.S., D.D.S., from Demonstrator to Instructor in Prosthetic Dentistry.

Robert Arthur Rooney, D.D.S., Demonstrator in Operative Dentistry.

Henry Sanford Alexander Fleming, D.D.S., from Demonstrator to Instructor in Orthodontia.

*School of Nursing:*

Helen Griffith McArthur, B.Sc., M.A., R.N., Acting Director, School of Nursing.

Lillian Thompson, B.Sc., Sessional Instructor in Social Work.

*School of Pharmacy:*

Arnold Whitney Matthews, M.Sc., Ph.D., from Associate Professor to Professor of Pharmacy, and Director of the School of Pharmacy.

Mervyn James Huston, M.Sc., from Instructor to Lecturer in Pharmacy.

*Department of Extension:*

Helen Stewart, B.A., Assistant in Dramatics.

Cyril Kenway, Acting Agricultural and Radio Secretary.

**Staff Resignations and Enlistments**

James Howden Whyte, B.Sc., M.Sc., Ph.D., Lecturer in Botany, leave of absence for war service.

Bob Fritz, Acting Director of Men's Athletics, resigned to enlist in armed forces.

Edward J. H. Greene, M. A., Instructor in French, resigned to enlist in armed forces.

Vera Major, B.Sc., Assistant in Household Economics, resigned.

Andrew Murray Revell, B.Sc., D.D.S., Demonstrator in Prosthetic Dentistry, resigned.

Marcus Meyer Dunsworth, D.D.S., Lecturer in Dental Medicine, resigned.

William Orobko, B.Sc., D.D.S., Sessional Demonstrator in Operative Dentistry, resigned to enlist in armed forces.

Paul Hervieux, D.D.S., Sessional Demonstrator in Operative Dentistry, resigned to enlist in armed forces.

Einar Maynard Gunderson, C.A., Sessional Assistant in Accounting, resigned.

Horace Jacobs, B.A., Fellow in Modern Languages, resigned to enlist in armed forces.

Lewis Gwynne Thomas, M. A., Sessional Instructor in History, leave of absence for war service.

John Thomas Jones, M.A., B.A., Assistant Professor of English, leave of absence for war service.

Ernest Geoffrey Cullwick, M.A., F.R.S.A., Professor of Electrical Engineering, leave of absence for war service.

Gordon Douglas Sutherland, D.D.S., Demonstrator in Orthodontia, resigned.

Ralph Elmer Carlyle, M.Sc., Ph.D., Sessional Lecturer in Soils, resigned.

Alexander Havelock MacLennan, B.Sc., M.D., Instructor in Obstetrics and Gynaecology, leave of absence for war service.

Mervyn James Huston, M.Sc., Lecturer in Pharmacy, leave of absence to complete post-graduate studies.

## REGISTRATION BY FACULTIES

As distributed in the various faculties and schools the numbers are as follows:

Total registration ..... 2,015

	Men	Women	Total
1. Arts and Science .....	329	246	575

	Men	Women	Total
B.A. ....	47	71	118
B.Sc. ....	126	51	177
School of Commerce .....	35	16	51
School of Household Economics.....		99	99
Combined Courses:			
B.Sc., M.D. ....	81	7	88
B.Sc., D.D.S. ....	3		3
B.Sc., for D.D.S. ....	25		25
B.A., LL.B. ....	11	1	12
Special .....	1	1	2

2. Applied Science .....	365	2	367
3. Agriculture .....	88	3	91
4. Law .....	26	2	28
5. Medicine .....	394	190	584

	Men	Women	Total
Medicine, 1942 .....	144	16	160
Medicine, 1943 .....	136	15	151*
Dentistry, 1942 .....	48	1	49
Dentistry, 1943 .....	44	1	45*
Pharmacy Degree .....	11	2	13
Pharmacy Diploma .....	11	9	20
Nursing Degree .....		81	81
Nursing Diploma .....		63	63
Diploma in Public Health .....		2	2

\*Half should be credited to 1942-43, and half to 1943-44.

	Men	Women	Total
6. Education .....	55	56	111
7. Divinity .....	13		13
8. Summer Session (1942) .....	169	117	286
9. Short Course in Dairying .....	18		18
10. Graduate Students .....	68	12	80

	Men	Women	Total
Arts and Science:			
M.A. ....	11	2	13
M.A. in Educ. ....	4		4
M.Sc. ....	12	1	13
M.Educ. ....	16	1	17
Agriculture:			
M.Sc. ....	14	1	15

Applied Science:						
M.Sc. ....	4	.....	4			
Special .....	7	7	14			
11. Auditors .....				5	2	7
				1,530	630	2,160
Less duplicates at summer session .....				29	18	47
Total.....				1,501	612	2,113
Less *half session of February-August, 1943, Medicine and Dentistry						98
						2,015

### GIFTS

- From the National Research Council to the Department of Field Crops, \$8,900; to the Department of Soils, \$1,010.02; for war projects in other Departments, \$6,625.
- From W. H. Kellogg Foundation for scholarships and loans to medical students, \$5,000.
- From Canadian Western Natural Gas, Light, Heat, and Power Company, Limited, a pilot plant for gas research.
- From Frank W. Horner, Limited, "Frank W. Horner Memorial Gift", to purchase books for the library of the School of Pharmacy, \$250.
- From Mrs. Dixon Craig to the Faculty of Law, the law library of the late Mr. Dixon Craig.
- From Mrs. C. McNabb to the School of Dentistry, eight books from the library of the late Captain D. R. McNabb.
- From Miss Linda B. McAdam to the Museum, an Indian basket and an Indian hunting knife.
- From Canadian Industries Limited to the School of Dentistry, four shipments of X-ray film.
- From Mr. W. J. Bown to the Faculty of Law, 29 volumes of law books.
- From Alberta Co-operative Wholesale, for co-operative education under the auspices of the Department of Extension, \$500.
- From Alberta Pharmaceutical Association to the School of Pharmacy, a bronze memorial plaque in honour of the late Professor Halley Hamilton Gaetz.
- From L. D. Caulk Co. to the School of Dentistry, \$80 of dental supplies.
- From the Trades and Labour Congress of Canada, presented to the Library by Mr. Alfred Farmilo, "The Martyrs of Tolpuddle".
- From Dr. J. S. Madill, excess on Student Loan Fund repayment, \$25.00.
- From Dr. P. W. Winthrop to the School of Dentistry, an old dental instrument.
- From Alberta Livestock Co-operative to the Department of Extension to assist in co-operative education, \$200.
- From United Grain Growers to the Department of Field Crops to aid in cereal testing work, \$1,000.
- From Canada Malting Company to the Department of Field Crops in aid of barley investigations, \$1,000.
- From Sperry Gyroscope Company, for use in Naval Course, books, charts, etc.

From Mr. C. G. Wates, 12-inch reflecting telescope.  
 From the class of 1943, Portfolio of Early Alberta Photographs.  
 From Alberta Wheat Pool to the Department of Field Crops to aid research on drought resistant wheats, \$100.  
 From Naugatuck Chemical to the Department of Field Crops in aid of research, \$1,101.  
 From Mr. E. J. Nicholson to the Library, books.  
 From the Carnegie Corporation of New York, final payment of the grant for the development of the Banff School of Fine Arts, \$1,000.  
 From Merck & Co., Ltd., to the Department of Animal Science for research work, \$1,000.  
 From Ciba Company Limited to the Department of Biochemistry for research work, \$1,000.  
 From the Women's Musical Club of Edmonton to the Department of Extension to assist in the purchase of musical films, \$127.  
 From Dr. Egerton L. Pope, a portrait of Dr. W. A. R. Kerr.

### NEW SCHOLARSHIPS AND PRIZES

The Phylis Osborne McGachie Bursary in Household Economics, \$100, established by Mr. F. E. Osborne.  
 Robert Tegler Scholarships in Mathematics, three scholarships of \$100 each, provided by the Robert Tegler Trust.  
 Dr. A. C. McGugan Prize in Nursing, a case of nurses' instruments.  
 The Women's Auxiliary of the University Hospital Prize in First Year Nursing, \$10.00 in books.  
 The Carnegie Corporation Language Scholarships, two scholarships of \$165.00 each for 1943, 1944, and 1945, to attend the University of Western Ontario's French Summer School at Trois-Pistoles, Quebec.

### PUBLICATIONS BY STAFF

#### Department of Anatomy.

Conn, L. C., Calder, J., MacGregor, J. W., and Shaner, R.F. Report of a case in which all pulmonary veins from both lungs drain into the superior vena cava. *Anat. Rec.* 83:335-340. 1942.

#### Department of Animal Science.

Sackville, J. P., and Sinclair, R. D. Cattle finishing in Alberta. *Bull.* 34, Second edition. 1942.  
 Sinclair, R. D. Feeding and management of swine. Joint series. Pub. 3. 1943.

#### Department of Biochemistry.

Hunter, G., and Tuba, J. Note on rose hips and evergreen as sources of Vitamin C. *Can. Med. Assoc. J.* 48:30-32. 1943.  
 Hunter, G. (1) The national food problem. (2) Vitamins A, D, E and K. (3) Vitamin B. *Western Druggist* 11:45-56. 1942.  
 Hunter, G. The quality of flour and the Canadian dietary. *Can. Baker.* January, 1943.  
 Cantor, M. M., and Scott, J. W. Chronic idiopathic hypothyroidism. *Can. Med. Assoc. J.* 47:551-552. 1942.

Cantor, M. M., Vant, J. R., Conn, L. C., and Huston, M. J. Sex hormones in obstetrics and gynaecology. *Can. Med. Assoc. J.* 47:12-23. 1942. (Trans. Les hormones sexuelles en obstetrique et en gynecologie. *Laval Medical.* 8:122-148. 1943.)

Waagen, H. K., and Pett, L. B. Some sources of Vitamin C in Alberta. *Can. J. Res.* 20:274-283. 1942.

Waagen, H. K., and Pett, L. B. The adequacy of Vitamin C in Alberta diets. *Can. J. Res.* 20:246-254. 1942.

#### **Department of Chemistry.**

Sandin, R. B. Organic compounds of polyvalent iodine. *Chem. Rev.* 32:249-276. 1943.

#### **Department of Civil and Municipal Engineering.**

Morrison, I. F. Written discussion of paper on the justification and control of the limit design method by F. P. Shearwood. *Eng. J.* 25:305-306. 1942.

#### **Department of Dairying.**

Wolochow, H., Thornton, H. R., and Hood, E. G. The cause and control of surface taint. Part I, Cause. McCallum, D. H., Thornton, H. R., Hood, E. G., and Wolochow, H. Part II, Control. Jointly with Dairy Research, Science Service, Department of Agriculture, Ottawa, and the Dairy Branch, Department of Agriculture, Edmonton. *Can. Dairy and Ice Cream J.* 21:21-36, 48-64. 1942.

Thornton, H. R., McCallum, D. H., and Wood, F. W. The sanitation and preservation of wooden churn barrels, A report to the Alberta Dairymen's Association. Jointly with the Dairy Branch, Department of Agriculture, Edmonton. *Can. Dairy and Ice Cream J.* 22-25-29, 50. 1943.

#### **Department of Dentistry.**

Hamilton, W. S. A review of actinomycosis. *Can. Dent. Assoc. J.* 8. September, 1942.

Gilchrist, H. A. Mottled enamel. *Can. Dent. Assoc. J.* 9. June, 1943.

#### **Department of Education.**

Argue, K. F. Should the teacher have the whole say? *Can. School J.* 20:353-355. 1942.

Argue, K. F. A framework for appraising the financing of education in the Canadian provinces, a report submitted to the Can. Coun. Educ. Res. pp. 82. 1942.

Argue, K. F. Financing education in the Canadian provinces, a report to the Can. Teachers' Fed. pp. 39. 1942.

Argue, K. F. Report of the survey committee appointed to ascertain the chief educational needs of the Dominion of Canada. *Can. and Newfoundland Educ. Assoc.* 4:28-35. 1942.

#### **Department of English.**

Gordon, R. K. Shakespeare's Henry IV and the Waverley Novels. *Mod. Language Rev.* 37:304-316. 1942.

#### **Department of Entomology.**

Brown, J. H. Tularaemia in Southern Alberta. *Can. J. Med. Tech.* 5(2):55-57. 1943.



Brown, J. H. Rocky Mountain spotted fever and sylvatic plague survey in Alberta. Alta. Health Worker 8:8-16. 1943.

#### **Department of Field Crops.**

Henry, A. W. On the value of Spergon for seed treatment in small-grain crops. Phytopath. 33(4):332-333. 1942.

#### **Department of Geology.**

Allan, J. A. The relation of the geology to the soils in the Blackfoot and Calgary sheets. Coll. Agr. Univ. Alta. Bull. 36, 102-119. 1942.

Warren, P. S. The *Spirifer argentarius* fauna in the Canadian Rockies. Trans. Roy. Soc. Can. 36 (IV):129-135. 1942.

Warren, P. S. Correlation of the Devonian sedimentary formation of North America. Bull. Geol. Soc. Amer. 53:1729-1794. 1942. (Co-author.)

#### **Department of History.**

Long, M. H. A History of the Canadian People. Vol. I, New France. pp. XIV, 376. Ryerson Press, Toronto. 1942.

#### **Department of Household Economics.**

Patrick, M. Food standards. J. Can. Diet. Assoc. 4(3):75. 1942.

#### **Department of Mathematics.**

Campbell, J. W. Motion re moving axes. Trans. Roy. Soc. Can. III, 34:1-6. 1942.

Keeping, E. S. Asteroids. J. Roy. Astron. Soc. Can. 35:411-420. 1942.

#### **Department of Medicine.**

Jamieson, H. C. Catechism in medical history. Can. Med. Assoc. J. Began September, 1942, appearing monthly.

Sprague, P. H. Bronchial asthma due to sensitivity to gum acacia. Can. Med. Assoc. J. 47(3):253. 1942.

MacLean, R. R. Procedures to be followed in obtaining the admission of a patient to a Provincial Mental Hospital. Alta. Med. Bull. October, 1942.

Cantor, M. M., Pett, L. B., and McKirdy, J. A. The evaluation of preparations of the Vitamin B-Complex. Can. Med. Assoc. J. 46:413-416. 1942.

Cantor, M. M., Vant, J. R., Conn, L. C., and Huston, M. J. Sex hormones in obstetrics and gynaecology. Can. Med. Assoc. J. 47:12-23. 1942.

Cantor, M. M., and Scott, J. W. Chronic idiopathic hypoparathyroidism. Can. Med. Assoc. J. 47:551-552. 1942.

Scott, J. W. The iron deficiency anaemias. Bull. Vancouver Med. Assoc. 19(2): 52-56. 1942.

Scott, J. W. Chronic arthritis. Bull. Vancouver Med. Assoc. 19(2):57-60. 1942.

#### **Department of Pharmacy.**

Cantor, M. M., Vant, J. R., Conn, L. C., and Huston, M. J. Sex hormones in obstetrics and gynaecology. Can. Med. Assoc. J. 47:12-23. 1942.

Matthews, A. W., and Foote, P. A. Florida volatile oils V. *Illicium Floridanum*, Ellis. J. Amer. Pharm. Assoc. 32:148-151. 1943.

Matthews, A. W. Water-soluble ointments. Western Druggist 11:61-68. 1942.

### **Department of Physiology and Pharmacology.**

Rodman, F. B., and Wright, H. N. Distribution and retention of arsphenamines in relation to physical properties. *Fed. Proc. Amer. Soc. Exp. Biol.* 2:91. 1943.

Rodman, F. B., and Wright, H. N. A note on the determination of arsenic in organic arsenical compounds. *J. Amer. Pharm. Assoc.* 31:200-202. 1942.

Ferguson, J. Cholestrerol and the heart, its effect on the activity of the heart of the frog and the turtle. *Can. Med. Assoc. J.* 47:60-62. 1942.

Ferguson, J. Effect of propylene glycol and progesterone on motility of the isolated intestine of the rabbit. *Endocrinol.* 32:57-58. 1943.

### **Department of Political Economy.**

Stewart, A. Will food win the war? Behind the Headlines. 2,9, *Can. Inst. Int. Affairs.* 1942.

Stewart, A. Canada in a hungry world. Behind the Headlines. 2,40, *Can. Inst. Int. Affairs.* 1942.

Stewart, A. Towards a fuller employment of material resources. *Pub. Affairs. Special issue Canadian Post-War Reconstruction.* 3,2. 1942.

Stewart, A. An approach to the problem of land valuation. *J. Amer. Soc. Farm Managers and Rural Appraisers.* October, 1942.

### **Department of Soils.**

Wyatt, F. A., Newton, J. D., Bowser, W. E., Odynsky, W., and Allan, J. A. Soil survey of Blackfoot and Calgary sheets. *Univ. Alta. Bull.* 39. 1942.

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### **Department of Surgery and Clinical Surgery.**

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### **Department of Zoology.**

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EXCERPTS FROM THE REPORTS OF ADMINISTRATIVE OFFICERS

The following excerpts from the reports of administrative officers give some indication of the broad scope of the work of the University.

Report of Dean G. M. Smith of the Faculty of Arts and Science

1.—Registration.

During the regular academic session, 1942-43, 582 students were registered in the Faculty of Arts and Science as compared with 693 in 1941-42 and 753 in 1940-41. Registrations have decreased in virtually all sides of the Faculty except in the pre-medical and pre-dental courses and in the School of Household Economics. The decrease has been most marked among students proceeding to the degree of Bachelor of Arts. The number of students who are candidates for degrees with Honors is declining except in the Department of Chemistry.

2.—Recommendations for degrees.

The number of students recommended for degrees at the Convocation of January 2, 1943, was as follows:

For the B.A. degree .....	28
For the B.Sc. degree .....	21
For the B.Com. degree .....	2
For the degree of B.Sc. in Household Economics .....	2
	—
	33
	==

The number of students recommended for degrees at the Convocation of May 18, 1943, was as follows:

For the B.A. degree .....	35
For the B.Sc. degree .....	37
For the B.Com degree .....	11
For the degree of B.Sc. in Household Economics .....	27
	—
	110
	==

3.—Legislation.

In 1943-44, the Faculty of Arts and Science will offer senior matriculation courses at the Grade XII level in the foreign languages, mathematics, and the sciences. These courses will be available to students holding the High School diploma with at least B standing who have been unable to complete all the courses for matriculation into the Faculties in the local schools. It is anticipated that such students with only one deficiency may complete work for a degree in Arts or Science in the normal time and that students with two deficiencies may graduate in the General Course in three years by attending one summer session in addition to the regular sessions.

Apart from these preliminary courses, virtually no new courses were established, although some were re-organized.

The requirement for admission to the pre-medical and pre-dental courses has been raised to an average of 60% in the prescribed courses of matriculation. Arrangements have been made by which students matriculating in French or German may meet the professional requirements in Latin in the University.

4. Owing to the decline in the number of students reading for Honors, it seems more important than ever to encourage coherent programmes in the General Course and continuity in related fields of study.

5. Following the Christmas term examinations, 60 students in this Faculty, of whom 39 were freshmen, were reported as having failed to meet the minimum requirements prescribed for further postponement of military service. Not all of those so reported actually withdrew. Some who were placed in low medical categories by the military authorities were not called and carried on at the University.

6. During the year, all men who were candidates for the B.Sc. degree, except pre-medical and pre-dental students, were registered with the Wartime Bureau of Technical Personnel.

7. The Council of the Faculty has discussed various proposals for the organization of academic sessions after the war and especially for meeting the problems which it is expected will arise by reason of the influx of large numbers of men from the armed services and possibly from war-industries. The discussions continue.

8. Students have again loyally carried out the requirements of the University in respect of training in the C.O.T.C., the U.A.T.C., and the Women's Auxiliary Corps.

### **Report of Dean R. D. Sinclair of the Faculty of Agriculture**

The Faculty of Agriculture in this University functions along two main lines, (1) academic and (2) experimental, and for purposes of clarity this report will be subdivided under these headings.

In addition to teaching and carrying on research work the members of the staff of the Faculty of Agriculture take part in extension work and thus maintain a close contact with the farm people of Alberta. The results of research are made available to the people by means of lectures at farm meetings, Agricultural Short Courses and Field Days, radio talks, and direct correspondence with individuals who request specific information. Close co-operation is offered by all Departments to the Department of Extension of the University of Alberta and the Extension Service of the Alberta Department of Agriculture.

#### **1.—*Academic.***

During the 1942-43 academic session, 90 students were enrolled in the Faculty of Agriculture as compared with a total of 113 for the 1941-42 term. The decrease is due to smaller registrations in the second and third year classes. Of the first year students, 22 entered the University direct from High Schools and 5 from the Provincial School of Agriculture at Olds. A total of 31 students were registered with courses completing the requirements for the degree of B.Sc. in Agriculture.

The present graduating class contains the final group of School of Agriculture students to receive the B.Sc. degree upon completing three years work in the University. The "new course", which has been in effect for two years, involves four years of university work following Grade XII from High School or Grade XI and a diploma from a Provincial School of Agriculture.

In accordance with authority granted by General Faculty Council, final examinations in the Faculty of Agriculture were conducted by individual departments during their own class periods and were completed by April 7th. In view of the very favourable spring weather which developed, it is believed that the release of

students by the date mentioned made a worth while contribution to the extremely short farm labour supply.

Students in the Faculty of Agriculture were subject to "science student" regulations during the term. Co-operation was extended to National Selective Service in placing undergraduate students in summer employment which would enable them to obtain appropriate professional experience and at the same time make the most useful contribution to the war effort. Graduating students have been enrolled with the Wartime Bureau of Technical Personnel.

Fourteen agricultural students were registered in the School of Graduate Studies. Of this number, 7 completed the requirements for the M.Sc. degree—1 in Dairying, 2 in Horticulture and 4 in Field Crops.

A group of 17 students attended the Dairy Short Course conducted by the Department of Dairying in co-operation with the Alberta Department of Agriculture. Another successful Babcock Testing Course for women was held. These courses are proving a valuable aid to the dairy industry.

The plan of obtaining "personality" ratings on students was continued during the year. As this study proceeds it is being noted that the students are availing themselves of the opportunity of improving personality. The information gained becomes a part of the student's record and is proving helpful to the Faculty in placing the graduates in the field of service for which they are best adapted.

No major changes were made in the course of studies during the year.

## 2.—*Experimental.*

The Department of Agricultural Engineering has assisted actively with the work of the Western Agricultural Engineering Committee which acts in an advisory capacity under the Prairie Farm Rehabilitation Act. This Committee during the year centred attention on the problem of keeping farm machinery in first class operating condition and, in addition, has made available information on labour saving equipment. The head of the Department is acting as Consultant to the Farm Machinery Rationing Appeal Board for Northern Alberta. During the year a survey was made of farm machinery problems in the Peace River district and in Southern Alberta. The new pick-up hay baler was the outstanding piece of new machinery observed.

In the Department of Soils the regular work was continued during the year with slight curtailment in certain phases due to gasoline and rubber restrictions. The soil survey work covered some 3,000,000 acres in the east-central portion of the Province. A report for this area is now in the course of preparation. The survey of the Calgary and Blackfoot Sheets completed in 1941 was reported in University of Alberta Bulletin No. 39 (July, 1942). The soil survey work was supported as usual by funds from the Dominion Department of Agriculture. Fertilizer experiments were continued and the research on legume inoculation was increased. This work is of great importance in view of its direct bearing on the agricultural programme for the wooded areas of the Province.

In view of the importance of the potato crop in wartime food supplies, the experiments in the Department of Horticulture dealing with potato seedlings is of special interest. About 1,000 seedlings from good parent stock are now one year old and provide promising material for further selections. Assistance has been



given to the Victory Garden movement, and problems relating to commercial seed production, commercial canning, and the storage of vegetables have been given consideration. A list of recommended varieties of fruits and vegetables for different zones in the province has been prepared.

Research on surface taint in butter was maintained in the Department of Dairying and an earlier suspicion that *Flavobacterium maloloris*, one of two organisms known to be able to cause the defect, occurs infrequently in Alberta waters was confirmed.

Since the Department of Entomology is operating on the basis of part-time services of one staff member, it has not been possible to engage in active research. Some progress was made during the academic term in mounting specimens which have been collected by the Department.

The Department of Field Crops received substantial grants from the National Research Council, the United Grain Growers, Limited, the Alberta Wheat Pool, and the Canada Malting Company. The last mentioned is a new grant of \$1,000 made to assist in the barley breeding programme. Some promising lines of drought-resistant hard wheats were tested for the first time. Fundamental studies were carried out with single and multiple crosses of wheat and barley, and it is believed that these are likely to give distinctly new leads in the cereal breeding work. During the year a licence was secured for a new variety of barley which has been named "Titan". This variety is strong strawed, stands upright when ripe and is much more resistant to loose smut than other smooth-awn barleys. Investigational work on seed setting in alfalfa is being continued with both field and greenhouse studies being involved. Much interest has been shown in the early sweet corn varieties introduced by the Department. There was a heavy demand for Altagold, the yellow variety, and many favourable comments have been received. Promising results in an endeavour to improve the potato crop by the production of disease-free seed has been obtained. An Alberta plan, with financial and other assistance from the Provincial Department of Agriculture, for producing Indexed Foundation Seed-potato Stock to supply growers of certified seed with a superior class of foundation material has been in operation for three years, and distinct evidence is at hand to indicate that the plan is producing valuable results. Studies on weed control have been carried out in co-operation with the Alberta Department of Agriculture. The facilities of the Biochemistry Division were largely turned over to war work during the year. Inasmuch as the work which is being done in association with the National Research Council is secret in nature it will not be reviewed at this time.

A new departure was tried last summer when the Department of Field Crops held a Visitors' Week. Despite travel restrictions and shortage of labour on farms, about 200 people visited the plots, greenhouses and laboratories.

Experimental work in the Department of Animal Science has been continued in the fields of beef cattle, dairy, sheep and swine production. Swine feeding investigations have centred very largely around a consideration of the use of larger amounts of vegetable proteins in supplemental mixtures. The marked increase in swine raising has led to a shortage of tankage, fish meal, and other animal proteins, and a need for the utilization of larger amounts of protein feeds of vegetable origin. The information which should become available as a result of the work being conducted on this problem should prove of considerable value to swine producers and assist feed manufacturers in designing protein-mineral supplements which



will meet the requirements laid down by the Feeds Administrator of the Agricultural Supplies Board. Beef cattle studies have been concerned with methods of utilizing farm grown feeds in beef making, special emphasis being placed on pasture crops. The herd of dual-purpose cows established two years ago has yielded some very helpful information. Further consideration was given during the year to the question of utilizing wheat in dairy cow rations. Another year's work on the use of cobalt as a supplement for pregnant ewes has been completed. In addition to the work carried on with the University flock, 600 range ewes were made available through the co-operation of the Dominion Experimental Station at Swift Current in order to investigate the problem under range conditions. A number of important projects relating to the use of riboflavin in poultry rations are in progress in the Poultry Division. Some phases of this work are being conducted in co-operation with the University of British Columbia and the Provincial Poultry Branch.

The twenty-second annual Feeders' Day was held in June, and was attended by over 400 farmers from various parts of the Province. A small exhibit of market cattle was sent to the Market Show held in Chicago in December. Several satisfactory awards, including one championship, were won by University bred animals.

Publications issued during the year for farmers' use were the following:

*Bulletin:*

- No. 24. Insect Pests of Grain in Alberta (reprinted).
- No. 34. Cattle Finishing in Alberta (reprinted).
- No. 39. Soil Survey of Blackfoot-Calgary Sheet.

*Joint Series:*

- No. 2. Budding and Grafting.

**Report of Dean R. S. L. Wilson of the Faculty of Applied Science**

The number of undergraduates in this faculty this session is 367; the previous record is 315 two years ago.

The distribution among years and departments is as follows:

First Year .....	183
Second Year .....	75
Comprised of:	
Chemical Engineering .....	21
Civil Engineering .....	16
Electrical Engineering .....	30
Mining Engineering .....	8
Third Year .....	53
Comprised of:	
Chemical Engineering .....	20
Civil Engineering .....	10
Electrical Engineering .....	14
Engineering Physics .....	1
Mining Engineering .....	8
Fourth Year .....	56
Comprised of:	
Chemical Engineering .....	19
Civil Engineering .....	16
Electrical Engineering .....	16

Engineering Physics .....	1.
Mining Engineering .....	4
Total .....	367

The first year registration is a new record and is due to the Canadian Government's desire to meet the great need for technically trained people in Armed Forces and war industries.

In addition to the regular university courses, certain special technical courses have been given to groups of R.C.A.F. and Naval men. These began in 1941 and are presently being continued for the Navy. To date nine such courses have been given for periods of from three to four months, one for five weeks only, and more than six hundred men have received instruction. Most of the work has been done in the Departments of Electrical Engineering and Physics and some in the Department of Mathematics.

Students' academic achievements on the whole are about the same as in former sessions. There were many late registrations due to the demands of employers to keep students engaged on important war projects as long as possible during the summer of 1942. Practically all students were employed.

Engineering students wishing to enlist in the Armed Forces must now obtain permission from the Minister of Labour. Permits may be issued on the recommendation of certain university officials. It is generally desirable to keep a successful student to the end of his course.

A good proportion of graduates will be given commissions in the technical branches of the Armed Forces.

Next session a group of 60 young recruits of the Canadian Army (Active) will take a course practically the same as the first year engineering. A contract has been made with the Department of National Defence for this purpose. If, in addition to this group, there is a large number of applicants for admission as civilian students to first year it may become necessary to resort to the institution of evening classes.

Some improvements in classroom space and laboratory equipment were made this year; especially noteworthy are two good size classrooms in the engineering laboratory buildings.

It is likely that further restrictions on the use of Convocation Hall for other than classroom purposes will become necessary if large numbers are registered in first and second years next session.

A general discussion in one meeting of Applied Science Faculty Council was devoted to the problems of facilities. Space, equipment and staff are over-taxed. Increase of numbers in junior classes ordinarily results in larger senior classes in later sessions. On the other hand, the incidence of permitted enlistments and employment tends to offset the increase.

The staff situation was most difficult. Just before the opening of the session a tragic accident deprived us of Professor Webb. It proved impossible to make another appointment in time to be of use during the session. Partial provision was made by engaging two part-time lecturers, while the remainder of Professor Webb's former duties was carried as extra load by members of the Civil Engineering Department staff.

Professor A. R. Greig, retired Professor of Mechanical Engineering from the University of Saskatchewan, very generously came to fill the corresponding position at Alberta for the session, as it has not been possible to fill this post in any other way.

Professor E. G. Cullwick, head of the Department of Electrical Engineering, was granted leave of absence January 1st in order that he might take a commission with the R.C.N.V.R. Commander Cullwick is now Director of Electrical Services in the Canadian Navy. Other appointments were made in the Department with Associate Professor Cornish as Acting Head. Early in April Professor Cornish became seriously ill, but it is hoped that he may be able to resume duties in September. A temporary appointment was made to take care of Professor Cornish's work with the Navy courses until then.

It is a pleasure to make this record of the fine co-operation of all members of the staff in the work of this Faculty. Their acceptance of extra work and their unremitting efforts to preserve customary standards made it possible to meet and overcome the many difficulties that arose during the session. Several members were engaged in research work on problems arising from the war and on important construction projects related to the war.

### Report of Dean M. E. LaZerte of the Faculty of Education

Faculty Council and the faculty staff are, as in 1941-42, without the services of Dr. H. E. Smith, who is now with the personnel division of the Department of National Defence. Mr. F. M. Salter, Department of English, has once again assisted us during the winter session with instruction in Education 58. By reducing practical work, both clinical and supervisory, it has been possible to maintain continuous operation of classes during the past twelve months.

The University High School was organized in the summer of 1942 and placed under the direction and supervision of the Faculty of Education. Although the school is small and rather poorly equipped for teacher-training purposes, it now provides a much needed service for the University and doubtless lays the foundation upon which a more complete training programme may be built after the war. The thanks of the Faculty of Education to the staff of the University High School, the Superintendent of Schools and the Edmonton School Board for their co-operation throughout the year is here recorded. The year's work in the new school has been very successful.

Enrolments in the Faculty of Education were as follows:

(a) Accelerated session, 1942 .....	33
(b) Summer Session, 1942 .....	118
(c) 1942-43 session:	
Freshmen .....	24
Second year .....	12
Third year .....	6
Graduates enrolled for B.Ed. (intramural) .....	12
Graduates enrolled for B.Ed. (extramural) .....	16
Special .....	1
Combined degrees .....	12
School of Graduate Studies (M.A. and M.Ed.) .....	23
	— 106

The number of candidates qualifying for diplomas or degrees during the year is as follows:

(a) Junior diploma .....	18
(b) Senior diploma .....	41
(c) B.Ed. degree .....	35
(d) M.A. or M.Ed. degree .....	2
	— 96

Continuing the policy begun in 1942, an accelerated teacher-training session opened on May 17th.

### **Report of Dean M. M. McIntyre of the Faculty of Law**

During the academic year there were 28 students in attendance in the Faculty of Law. Fourteen of this number were in the graduating year, and this full number was recommended for the degree of Bachelor of Laws.

This year three new courses were added to the curriculum (Taxation, Insurance and Practice 1). This makes the law course extremely heavy, but the Faculty is of the unanimous opinion that all the courses now taught are essential and the student body shares that view.

Our relations with the Law Society and with the Education Committee of the Benchers continue to be very close and cordial.

John Alexander Weir, K.C., B.A., LL.B., Dean of the Faculty, died on June 3, 1942. His untimely death was a tragic loss to the University and to the profession. The students are showing their loyalty to the late Dean Weir and to the University by arranging with a committee of the benchers of the Law Society to create the John Alexander Weir Memorial Library. The Faculty, the students and the committee referred to above, take this opportunity to express their gratitude to the President for his co-operation in this enterprise.

The Faculty of Law in this University has always been understaffed. It would not have been possible to have secured a full-time professor capable of and willing to carry the teaching load formerly carried by Dean Weir. After much consideration the number of hours taught by him was divided among part-time instructors.

We were very fortunate in our selection of part-time instructors, all of whom have done excellent work under difficulties increased by inadequate transportation facilities.

During the year a member of the graduating class, Francis Eugene LaBrie, was awarded the John Wesley Rowell Memorial Fellowship by the Faculty of Law of the University of Toronto. This award confers distinction upon the University of Alberta as well as upon Mr. LaBrie.

The Law School feels that it has a heavy responsibility in training even its small number of young men and women who may assist their fellow-men in arriving at wise social decisions in the upheavals which the next few years may bring.

### **Report of Acting Dean J. J. Ower of the Faculty of Medicine**

Herewith a brief report of the activities within the Faculty of Medicine including the affiliated Schools of Nursing, Pharmacy and Dentistry.

#### *Nursing.*

Noted in previous reports, the inadequacy of housing and classroom facilities for the students of this School must again be stressed. This constitutes a problem

which continues to present itself with great urgency for solution in the form of a proper nurses' home.

In spite of wartime limitations, the School will undertake two types of post-graduate courses in the near future—firstly, with financial help from the Alberta Association of Registered Nurses, a summer course in 1943 which will give one-half of the final year of the B.Sc. in Nursing Course in Public Health Nursing as now given or, as an alternative, in Ward Teaching and Supervision (a new course); secondly, with the assistance of the Provincial Department of Health, an autumn course in advanced obstetrics designed to alleviate to some extent the great need for competent obstetrical care in many of the outlying districts of the province.

#### *Pharmacy.*

There is a markedly decreased enrolment in the first year on account of an acute shortage of registered apprentices in the Province due to the fact that to date the selective service regulations make no provision for the deferment of this group—a matter under discussion with the War Services Board by the Alberta Pharmaceutical Association.

As heretofore lectures in material medica were given to students of the School of Nursing and in materia medica and pharmacy to medical students.

Fourteen members of the 1942 graduating class of a total of nineteen male graduates are now in military service. Seventy graduates of the School are known to have joined the armed forces—this being more than 20% of the male alumni.

#### *Dentistry.*

Coincidentally with the courses in Medicine, those of the whole Dental School were accelerated from June 1st, 1942, to allow for the graduation of three classes in ten calendar years. At the same time the Department of National Defence agreed to enlist as privates in the Canadian Dental Corps Active Service Forces all physically eligible male members of the upper two years.

Under the accelerated scheme 13 students—1 woman and 12 enlisted men—were graduated at a special convocation on January 4th, 1943, and the latter proceeded at once on active service with commissioned rank. Some financial assistance chiefly to dental students in the junior years of the accelerated courses has been provided by further Dominion-Provincial grants and Kellogg Foundation loans.

The urgent need for dental equipment as noted in the previous report has been to some extent remedied, and a fully equipped demonstration room in the Medical Building is now in operation. The problem of better quarters for the School as a whole remains of the same prime importance as before.

A special report on the condition of the School is being prepared by the Director recently returned from conferences and a survey of several dental schools in the United States.

#### *Medicine.*

The switch over from the old to the new curriculum is proceeding according to plan, and the new first and second years are now being given. A fusion of similar courses of the new second and old fourth years has been arranged to carry these groups through without having to resort to duplicate teaching at this time.

Synchronously with the School of Dentistry, the whole course in Medicine was accelerated from June 1st, 1942. As noted in the previous report, all eligible male students of the fifth and sixth years enlisted as privates in the Royal Canadian



Army Medical Corps on June 1st, 1942, and subsequently those of the incoming fifth year of the 1943 accelerated course enlisted on February 1st, 1943. Two women members of this class and one from the graduating class were enlisted as privates in the Canadian Women's Army Corps on the same date.

The 1943 class of 33 members was graduated at the special Convocation of January 4th and entered an eight month period of internship, after which the 28 enlisted members will be commissioned in the R.C.A.M.C.

To assist needy medical students in the accelerated courses, especially those in the lower years who cannot yet enlist, a further donation was received from the Kellogg Foundation, and the Dominion-Provincial grants have been continued.

An offer to convert the annual spring refresher course into one especially designed for medical officers of the armed forces now stationed in Western Canada was made by the Faculty to the three Military Medical Headquarters in Ottawa. This was accepted, and a very successful and comprehensive course was staged during the week May 3rd-May 7th, 1943. In attendance were 78 R.C.A.M.C., 62 R.C.A.F., 6 U.S.M.C., and 2 R.C.N.V.R. medical officers, as well as 60 civilian doctors not on the University staff. These with staff members and medical students having their mid-session holiday at that time gave an average daily attendance of approximately 250.

The recent improvement in the economic condition of people in this locality has had a marked effect on the attendance at the University Hospital outdoor department, with the result that a further scarcity of clinical teaching material has developed.

### **Report of the Chairman of the School of Graduate Studies, Dean G. M. Smith**

1. During the academic year, 1942-43, 66 students have been registered in the School of Graduate Studies in candidature for higher degrees. In addition, 14 graduates who are not candidates for any higher degree have been registered in the School as Special Graduate Students.

The distribution of candidates for higher degrees according to departments has been as follows:

Animal Science .....	2	History .....	6
Applied Science .....	4	Horticulture .....	2
Biochemistry .....	2	Mathematics .....	1
Chemistry .....	10	Philosophy .....	3
Classics .....	1	Political Economy .....	2
Dairying .....	1	Soils .....	1
Education .....	21		—
English .....	1		66
Field Crops .....	9		

2. Virtually all the candidates for the degree of Master of Arts and for higher degrees in Education have been extra-mural students engaged in teaching or in other employment. Candidates for the degree of Master of Science have been in attendance during the regular academic session. Many have been engaged on projects of war research. The presence of others, not so engaged, has been with the approval of the Mobilization Board. In 1943-44, admission to the Graduate



School for post-graduate work in Science will require the consent of the Wartime Bureau of Technical Personnel.

3. The School of Graduate Studies recommends that the Robert Tegler Research Scholarship be divided equally between William George Corns of the Graduate School (Field Crops) and Frank H. Foxlee of the Graduate School (Chemistry), and that the two University of Alberta Research Scholarships be awarded equally among Raymond Urgel Lemieux and Gordon Hart Segall (graduating students in Honors Chemistry), Lorne G. McDiarmid and Peter J. Sereda (graduating students in Chemical Engineering).

### **Report of the Librarian, Mr. D. E. Cameron**

The increased attention to study shown by the student body throughout the year had a notable effect on the use of the Library; all reading-room space was fully used from the beginning of the term, and use was made also of auxiliary rooms, at hours in which they were free. For the last month of the term, the Library was open for 14 hours daily from Monday to Friday, and to meet the request of the medical students, the Medical Library is now open on three evenings each week. Twice our present space for readers could now be used to good advantage.

As it is impossible to obtain equipment urgently required, particularly for filing catalogue and other cards, temporary provision only can be made. Unusual delays occur in the delivery of books, so that we still await many that have been long on order. The lack of space imposes on us the necessity of tedious and time-consuming moves and temporary shifts, which always seem to have already passed the tolerable limit. The Library owes much to the patience and willingness of its staff.

The usual friendly contacts have been maintained with professional societies in the Province, and with members of the public who make calls on us for our help. Many visits have been received from University men in the city on war service, and professional members of the services, Canadian and American, have made use of our facilities, particularly in connection with northern work. This aspect of the year's work has been found most interesting, and visitors have expressed their pleasure at being made welcome to avail themselves of our aid.

The Woods Collection on Canadian-U.S. Relations now nears completion. The books in this collection have been widely used, and many of the staff have drawn on them for useful reading.

The usual arrangements for co-operation with the Department of Education Summer School were satisfactorily carried through.

A very useful addition of school texts was made to the College of Education Library, at very small cost, and the activity in books on education has been one of the features of the library year.

As usual, books have been circulated to Summer School students in the months preceding the Summer School.

The Universities of the Allied Nations are preparing, by collecting useful material, chiefly duplicate journals, to aid in re-establishing damaged libraries after the war. Our Library is joining in this useful movement, and will presently ask the aid of members of the staff who may have books and journals of use in University work to contribute for this purpose.

The number of accessioned books is now 76,667, an increase of 2,030 in the year. This number is diminished partly by increased cost, but mainly by greater delays in delivery, which may now run to many months. A larger number of volumes than usual also await accessioning.

During the year valuable gifts have been made to the Library, and duly acknowledged. St. Joseph's College has given us several hundred volumes, including interesting Canadian items, and a long run of the publications of the Smithsonian Institution, which the Library is glad to receive. The College of Physicians and Surgeons again gave a grant of \$200 for medical books, and the Frank W. Horner Company of Montreal has given a first grant of \$250 for the establishment of a Frank Wyeth Horner Memorial Library in the School of Pharmacy. This generous grant has not yet been expended.

The Provincial Department gave a useful collection of Herd Books, and from the estate of the late Mr. Dixon Craig, J.C., a valuable collection of law books was received.

Other gifts were received from: The Dominion Statistician; The Carnegie Institution; the Bata Shoe Company; the State of New Hampshire; University of Michigan; Mr. C. McNabb, Lethbridge, dental books; Mr. J. W. Bown, law books; Mr. F. G. Roe; Mr. J. W. Knight of Utah; the Czechoslovak National Council; Transvaal Chamber of Mines; Dean Smith; Dr. R. K. Gordon; Dr. Munroe and Dr. Scott, medical journals; The Forsyth Library, Kansas; The Carnegie Endowment for International Peace; the Women's Auxiliary, books for the Nurses' Library; Canada Steamship Lines; The Ryerson Press; Mrs. Mona Gathercole, six volumes; The U.S.S.R.; Metropolitan Life Co.; The Salvation Army; Edmonton Branch of the Engineering Institute; Seagrams, Ltd.; The Rowfant Club of Cleveland; The Hoover War Library; G. D. Valassis, Esq.; Dr. J. H. Stewart, Cleveland; Messrs. Crane, Ltd.; The Rotarian; The Newberry Library; H. M. E. Evans, Esq.; Canadian Society of Technical Agriculturists; Mr. J. T. Jones; The Rockefeller Foundation; Mr. P. F. Goodrich; The American Museum of Natural History; The Department of External Affairs; Dr. Bulyea, collection of dental books; Mt. Allison University; McGill University; Canadian Medical Association; D. U. Fraternity; Waldron K. Post, Esq., University College, Cardiff; H. C. Madsen, Esq.; Dr. W. H. Alexander; Professor M. H. Long; New York State Library; The Canadian Social Hygiene Council.

The most interesting and valuable single purchase during the year has been the acquisition from Mr. J. W. Bown of the important collection of Organ Music formed by the late J. J. Birch, Esq. This will form the foundation of a Music Library, to be later developed.

The Library acknowledges with pleasure the continued courtesy of other Libraries, with which friendly exchanges take place, and wishes to record its thanks to the Library staff for unbroken loyalty and willing service, under conditions that have often been trying.

For the convenience of the medical practitioners of the Province a list of all recent additions to the Medical Library was printed and circulated, the College of Physicians paying the cost of printing. The service to practitioners steadily grows.

## Report of the Provost, Dr. J. M. MacEachran

### 1.—STUDENTS' UNION.

#### (a) *Administration.*

The report of the President of the Students' Union at the final meeting of the Committee on Student Affairs indicated that, in spite of the increased demands upon the students' time and energy occasioned by the programme of war service training and by the high academic standards demanded, the affairs of the Students' Union were conducted in a manner which reflected much credit upon its administrative officers. Mr. Lloyd Grisdale, who promised to be a most efficient President, was unfortunately forced, on account of illness, to relinquish, early in the session, the major part of his duties. These were taken over by the Vice-President, Miss Doris Thompson, who, in spite of many difficulties which had to be faced, with the able assistance of Mr. Robert Black, Secretary, and Mr. Louis Lebel, Treasurer, succeeded in guiding the affairs of the Students' Union in a very commendable manner.

#### (b) *Finances.*

The financial statement presented by the Treasurer showed a credit balance for the session of \$2,675.78. The major part of this amount will be deposited to the credit of the Building Fund Trust.

#### (c) *Students' War Services and Charities.*

The total donations of the students to War Services and Charities were as follows:

Christmas Fund .....	\$ 389.13
International S.S. ....	300.00
Women's War Services .....	53.36
War Contact Fund .....	400.00
Poppy Day .....	65.00
Mobile Canteen Drive .....	2,000.00
Total .....	<hr/> \$3,216.49

#### (d) *Athletics.*

Early in the session the Students' Athletic Boards decided voluntarily to discontinue intercollegiate competitions and to devote their whole attention to inter-faculty competitions. In spite of certain serious handicaps—the absence of the Athletic Director on active service, the inadequate gymnasium and rink facilities and the exceptionally cold weather—the major athletic competitions were carried on quite successfully and enthusiastically. As it is in the interests of the War Service Training as well as of the physical and recreational welfare of the students that athletic activities be encouraged, it is hoped that it will be possible next session to secure a part-time Athletic Director and to provide suitable accommodation for such popular minor athletic activities as boxing, wrestling, fencing and archery.

#### (e) *Literary Society.*

The report of the President of the Students' Union contains accounts of the continued excellent work of the Philharmonic Society and the activities of the Dramatic Society and the Political Science and Debating Clubs. There seems to be

a lack of harmony in the Dramatic Club and a lack of interest in debating, which is unfortunate.

In view of the amount of time required for practices and rehearsals of the annual Philharmonic performance and the annual Spring Play, the University War Service Training Board has decided that it will not be possible to continue these activities for the remainder of the duration of the war.

(f) *Social Functions.*

The number of major Social Functions have been reduced to three. No special restrictions have been placed upon Faculty and Club Functions, but these, as well as the major functions, have been conducted with the minimum of expense and publicity and without any appreciable diminution of their enjoyment and social value. While all dinners and the greater number of dances have been held in the city, they have all been satisfactorily conducted, and no cases of indiscipline have come before the new Enforcement and Disciplinary Committee or myself.

(g) *Students' Survey Report.*

During the past summer a Committee of the Students' Council conducted a very thorough survey of students' organizations and activities and made certain recommendations for future consideration. The work of this Committee was highly commended by the Committee on Student Affairs.

Some of these recommendations have during the session been incorporated as amendments to the Constitution of the Students' Union. The most important are the creation of an Enforcement and Disciplinary Committee and a Women's Disciplinary Committee—the former to enforce regulations laid down in the Constitution of the Students' Union and to deal with cases of indiscipline rising out of the conduct of student functions and out of other activities of special concern to the student body, and the latter to deal with cases of indiscipline of special concern to the women students.

(h) *Student Accommodation.*

Since the Residences were taken over by the Air Force, a Committee of students appointed by the Students' Council has each year undertaken to assist students in procuring rooms and boarding houses. So far the Committee has been reasonably successful in finding the accommodation required. Next session, however, will, on account of the influx of Americans into the city, present a very difficult problem. The new Students' Council, accordingly, is planning to face this problem as early as possible before the opening of the session 1943-44.

2.—PHYSICAL EDUCATION.

At the beginning of the session, the Committee on Physical Education decided to give credit for Physical Education to all first year students satisfying the requirements of the War Service Training, which included drill and physical training. This has worked satisfactorily. At the same time, the Committee has realized the necessity of beginning as early as possible to plan for a system of physical education, including athletics, which will ensure the most complete co-operation with the new scheme of physical health education which will in all probability be a feature of the new National Health scheme now under consideration.

3.—DISCIPLINE.

The general conduct of the student body has never been more satisfactory than during the present session. The number of cases of indiscipline which have been

dealt with in the Provost's Office have been few, and these have not been of a serious nature.

#### 4.—MEDICAL SERVICES.

Great satisfaction has been expressed by the Committee on Physical Education and by the students generally with the new Infirmary and the admirable manner in which it has been supervised by the Resident Nurse, Miss Revell. The Medical staff have been fortunate in having to face no epidemics during the session. The financial statement will show a surplus of approximately \$500 for the year.

#### 5.—FRATERNITIES.

The Committee on Fraternities has met with representatives of the various Fraternities twice during the year. The main problem has been to decrease the interruption of work due to rushing at the beginning of the session. The number of days for rushing has been limited to ten, beginning the second week of the first term. The Fraternities have also agreed to a strict limitation of the number of social functions usually held during the rushing period.

#### 6.—THE ADVISER TO WOMEN STUDENTS.

I should like to conclude my report with a word of appreciation of the excellent services which have been rendered during the session by Dr. Mary Winspear, Adviser to the Women Students. The absence of a Women's Residence is a very serious matter, especially for the first year women students, and Dr. Winspear's deep interest in the welfare of the women students has, on this account, been specially valuable. The statement contained in the report of the Vice-President of the Students' Union in regard to the assistance Dr. Winspear has given in matters personal, social and intellectual is a fine tribute to the spirit in which she has assumed the very important duties of her position during her first year on the University staff.

### **Report of the Officer Commanding, Canadian Officers Training Corps, Lieutenant Colonel P. S. Warren**

Owing to the decision that University students would undergo only two years compulsory training during their University course, except those who wished to apply for commissions in the Army, the number taking military training was notably reduced. The decision to accept a proposal by the R.C.A.F. to introduce a University Air Training Corps to conduct Air Force Training along similar lines as that of the Canadian Officers training Corps further reduced the numbers taking Army training. The greatest number registered for military training at any time during the year was 480. The number present on the Muster parade which preceded the annual inspection of March 20 was 451. The discrepancy between these numbers is largely accounted for by those students who were reported to the National Selective Service, Mobilization Section, after the Christmas examinations as unsatisfactory students. The number of students who were excused training on account of low medical categories is 70.

In previous years, military training was carried out by two units, the Canadian Officers Training Corps and the Auxiliary Battalion. The latter unit was responsible for Basic Training such as is carried out at Basic Training Centres, whereas the C.O.T.C. gave instruction in basic Officers' training for those who had completed their basic training in the Auxiliary Battalion and applied for Officers' qualifications, with a view of going active. Changes promulgated by N.D.H.Q.



this year did away with such examinations, and C.O.T.C. training was reduced to a more advanced type of basic training, and so the distinction between the C.O.T.C. and the Auxiliary Battalion largely ceased to exist except in degree of training. Permission was asked and received from No. 13 Military District Headquarters to include all personnel taking Army training in one unit, the Canadian Officers Training Corps. All members of the unit receive 15 days' Headquarters pay, whereas in other years the Auxiliary Battalion did not receive Headquarters pay.

The C.O.T.C. now comprises four companies. Two companies, C and D, include freshmen doing their first year basic training; one company, B, comprises more senior students doing their second year basic training; and one company, A, includes those students who have applied for senior training with a view of going on Active Service. A company also provides the instructoral staff for the other three companies. The number of students from A company who have applied to go active this spring with a view of obtaining a commission is 45.

The present ruling that students complete their basic training (440 hours) has reduced the numbers taking training, but has greatly raised the morale of the unit. There has been very little trouble requiring disciplinary action in the unit this year, and the efficiency of the unit as shown at the Annual Inspection showed a marked improvement over other years.

Complaints from students that Military training has a serious effect on their studies are not considered valid. Most of the students train two afternoons a week from 4:00 to 6:00 p.m. with an occasional Saturday afternoon parade. Most students do little that is important toward their studies during these hours, and military training gives many students much needed exercise that they would not get otherwise.

Many members of the staff have given much of their time in assisting with training in the Canadian Officers Training Corps. The following is a list of those who are participating in such training: Lt. Col. P. S. Warren, Major G. M. Smith, Major A. West, Capt. C. R. Tracy, Capt. F. Owen, Capt. W. G. Hardy, Capt. J. W. Scott, Lieutenants A. Stewart, W. H. Johns, W. Broadfoot, G. A. Elliott, and R. B. Miller, and Cpl. W. Odynski.

#### **Report of the Officer Commanding, University Air Training Corps, Squadron Leader R. M. Hardy**

This session saw the inauguration of a University Air Training scheme at several Canadian Universities. No. 8 Squadron University Air Training Corps was organized at this University. One hundred and eighty-five students registered at the University volunteered, and met the R.C.A.F. medical standards for aircrew or ground duties and were enlisted in the Unit. Forty airmen were enlisted as one flight of the squadron at Mount Royal College in Calgary. The Mount Royal flight was later organized into a separate Squadron.

The squadron was placed under the Command of Professor R. M. Hardy, who was commissioned a Squadron Leader in the U.A.T.C. of the R.C.A.F. Dr. H. R. Thornton and Professor F. M. Salter assisted in the training and were commissioned Flight Lieutenants in the U.A.T.C. of the R.C.A.F.

R.C.A.F. personnel posted for administrative and training purposes included an adjutant, a disciplinarian and a signals instructor. Headquarters of the Unit were established in the No. 4 I.T.S. Drill Hall on the campus.



The training programme consisted of basic aircrew training. Parades were held from 1600 to 1800 hours Monday, Wednesday and Friday throughout the academic year. Instruction was given in part by the instructional staff of the University, in part by the R.C.A.F. personnel posted to the unit, and in part by the instructional staff of the No. 4 I.T.S. Professors Thornton, Salter and Hardy all assisted in the instruction. Dr. M. M. Cantor handled the instruction in Sanitation and Hygiene as a civilian instructor.

The year's training included a two-week period spent at a Service Flying Training School. One group proceeded to No. 15 S.F.T.S., Claresholm, one to No. 37 S.F.T.S., Calgary, and one to No. 32 S.F.T.S., Penhold.

Through the courtesy of Captain W. R. May, Manager, No. 2 Air Observers School, operated by Canadian Airways Training Limited, five prizes were awarded to the airmen securing the highest standing in the Navigation training.

While the training constituted a fairly heavy programme, a high degree of enthusiasm manifested itself throughout the session.

**Report on the University Naval Training Division by Lieutenant Colonel P. S. Warren**

By request of Headquarters, R.C.N., the University has accepted a plan of Naval training in the University along somewhat similar lines to that of the C.O.T.C. and U.A.T.C., known as the University Naval Training Division. Recruiting for this has already taken place and 44 students have volunteered. They will go to Esquimault for two weeks training this spring in lieu of going to camp. Four third-year Electrical Engineers will be taken on strength for the summer, and will undergo intensive training with the idea of joining the Navy as technical officers next spring. Professor A. W. Matthews has been nominated Officer in charge with rank of Lieut. Commander.

**Report of the Director, Women's War Services, Miss M. Patrick**

Women undergraduates, except a few who were granted exemption, were required to put in 60 hours on war services.

Those granted exemptions were:

- (1) Students who are not physically fit.
- (2) Partial students.
- (3) Students in Education who were taking three hours of Physical Education and First Aid and those who were doing practice teaching.
- (4) Senior nurses who were doing field work during the second term.
- (5) Certain students who were doing special work.

Total number of students (exclusive of those who withdrew), 329.

Total number of exemptions, 37.

Most first year students were required to take Physical Education and drill. Other students were allowed to choose the work they wished to do from the courses and work provided. Many students did several types of work.

The registration was as follows:

St. John's Ambulance Courses:

First Aid .....	63
A.R.P. ....	17
Signalling .....	14

Social Service (4 lectures) .....	48
Precision Instruments .....	33
Drill and Physical Education (compulsory for first year) .....	188
Bandages and Dressings .....	15
Clerical Work .....	5
Red Cross (many completed their hours at this work) .....	141
Canteen .....	*47

(\*Other students put in some time at canteen, making a total of 120 or more.)

Much experience has been gained during this first year of compulsory war work which will simplify things next year.

On the whole, the spirit displayed has been excellent. Many students have put in extra hours.

### Report of the Director of the Department of Extension, Mr. Donald Cameron

#### *Statistical Survey.*

Number of lectures, general and drama .....	112
Aggregate attendance .....	10,378

#### *Library and Debating Service.*

Number of Regular Libraries circulated .....	100
Number of times sent out .....	127
Number of Special Libraries circulated .....	54
Number of small parcels of reference books, pamphlets, magazines and pictures sent out .....	302

#### *Travelling Library circulation:*

Regular .....	8,284
Special .....	2,136
	— 10,420

#### *Open Shelf circulation:*

Books .....	19,208
Pamphlets and clippings .....	953
Periodicals .....	1,174
	— 21,335

Books and magazines sent to Banff School of Fine Arts .....	215
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Communities supplied with plays .....	400
Number of adult single plans sent out .....	1,782
Number of juvenile single plays sent out .....	77
Number of adult collections sent out .....	430
Number of juvenile collections .....	120
	— 2,409

Number of package libraries for debaters .....	208
--	-----

#### *Visual Instruction.*

Number of times lanterns loaned .....	29
Number of times filmslides projectors loaned .....	18
Sets of lantern slides circulated .....	511
Number of times used .....	790
Aggregate attendance lantern lectures .....	36,340
Sets of filmslides circulated .....	1,492

Number of times used .....	2,860	
Aggregate attendance .....		100,100
Sets of moving picture films circulated .....	3,056	
Number of reels in sets .....	14,495	
Number of showings .....	5,857	
Aggregate attendance at moving picture programmes .....		659,150

*National Film Board.*

Number of showings of N.F.B. programmes .....	2,002	
Aggregate attendance .....		315,537

*Radio.*

No. of ¼-hour periods:	CKUA	CBC
Musical .....	3,013	1,506—4,519
News .....	19	815— 834
General Talks .....	486	270— 756
Agricultural .....	151	420— 571
School .....	381	26— 407
Drama .....	47	93— 140
Variety .....	89	16— 105
Religious .....	.....	79— 79
	4,186	3,225—7,411

Total number hours broadcasting ..... 1,852 ¾

*Conferences.*

University Week for Farm Young People:

Delegates .....	125
Leaders .....	3

	128
Refresher Course in Municipal Administration .....	60
Land Inspectors' Short Course .....	41
Livestock Co-operative Short Course .....	29
University Short Course and Co-op. Conference .....	200

*Study Groups.*

Number of sets sent out .....	297
Estimated attendance at study groups .....	1,000

*Publications.*

Press Bulletin:

Number of issues .....	1
Circulation .....	5,500

Agricultural Publications:

Number sent out during the year .....	10,574
Estimated number of Joint series and mimeographed circulars on poultry, gardening, etc. ....	1,000
	11,574

Number of individual requests received .....	1,900
Total number of bulletins distributed since inception of service .....	347,487
The New Trail: 3 issues, 3,000 each .....	9,000
Stage Door .....	250

### *Fine Arts.*

#### *Drama:*

Number of adjudications at Festivals .....	8	
Estimated attendance at Festivals .....		1,600
Number of Stage Door Review broadcasts .....	23	
Enrolment at Edmonton Music Class .....	24	
Enrolment at Banff School of Fine Arts .....	196	
Enrolment at Art School, Lethbridge .....	15	
	<hr/>	235

#### *Alberta School of Community Life.*

Attendance at Olds .....	100	
Attendance at Gooseberry Lake .....	225	
	<hr/>	325

#### *Canadian Legion War Services.*

Registrations for C.L.E.S. courses .....		2,426
Courses other than C.L.E.S. ....		73
Attendance at tutorial classes .....		580

#### *Recapitulation.*

Total aggregate attendance at lectures, lantern slide lectures, film slide programmes, National Film Board programmes, debating service, Farm Young People's Week, Study Groups, Banff School of Fine Arts, Edmonton Music Course, Art School in Lethbridge, Alberta School of Community Life, Gooseberry Lake Conference, Refresher Course in Municipal Administration, Land Inspectors Course, Co-op. Short Course, Adjudications (festivals), Canadian Legion War Services .....		1,128,202
Total circulation of books, travelling libraries, package libraries, plays, periodicals .....		34,889
Total circulation of Press Bulletin, Agricultural Publications, The New Trail, Stage Door .....		26,324

#### *Conclusion.*

With this report the Department of Extension concludes 30 years of continuous service. The fact that during the year an aggregate of 1,128,202 people took advantage of the services offered may be taken as an indication that few people within the boundaries of the Province escape coming in touch with the University through one or another of its services. This is a record that is probably equalled by few universities in Canada; yet those of us charged with the responsibility of carrying out the programme know that we are only touching the fringe of the possibilities in the field of adult education.

During that brief 30 years the people served by this University have gone through two world wars and a general depression, with all their horror and waste of everything a University stands for. The tasks of peace and re-establishment which will follow this war will be greater than those of any previous time, and if those tasks are to be met effectively it will require the organization and direction of a programme of adult education and public information on a scale far greater than anything yet contemplated. Probably no period in history has been charged with greater possibilities for a great advance in human progress than the period we are

now entering. At the same time the future holds many portents of disaster unless we avoid the mistakes of the past. The key to success or failure is understanding, education, and information at every level of age and society.

Given adequate support which will enable them to use all the modern means of communication, universities and their departments of extension will be able to play a major role in creating that universal understanding which is essential to human welfare everywhere.

## **Report of the Acting Director of the Provincial Laboratory, Dr. J. J. Ower**

January, 1942, to December, 1942

The nature of the material handled does not vary materially from year to year, the bulk of the work being fundamentally related to the incidence of infectious diseases in the Province, the balance being associated with the teaching needs of the bacteriological and pathological departments of the Faculty of Medicine.

During the year the number of cases of diphtheria reported was somewhat greater than in 1941, and this resulted in the doubling of the diagnostic tests for this disease.

The greater control of tuberculosis and the presence of only a few sporadic cases of typhoid fever keep the routine examinations for these conditions more or less on a level; a considerable portion of the service in regard to the latter disease is the large number of analyses of waters carried out in conjunction with the Provincial Analyst. The establishment of numerous military camps since the beginning of the war has more than doubled this routine. The cyclic increase in wild rabbits during the past two years has augmented the number of cases of tularemia, and as a result the tests for this infectious disease have continued to be more numerous during this period.

The suspension, once again at our request, of Section 46 of the Provincial Health Regulations has resulted in an appreciable drop in the number of pathological specimens from hospitals throughout the Province, but enough remain to make this service still very heavy.

A great demand has developed for the Ascheim-Zondek test for pregnancy, but although the number of tests performed during the year increased 30%, they have had to be rigidly restricted as a result of difficulties arising from limited accommodation for, and an acute scarcity of, experimental animals.

The main increase in the volume of work for the year, as in 1941, affected the serological department and was directly due to the needs of the military authorities as the result of the increasing enlistment and maintenance of large armed forces within the Province. The serological tests for syphilis constitute the major portion of the routine, and reached the high mark of 71,500 as compared to 40,500 during the previous year, an increase of over 40%. The great quantity of this work necessitated an invasion of the teaching space on the second floor of the Medical Building for necessary working space.

Lack of help, both technical and non-technical, constantly changing substaff, scarcity of certain supplies and other abnormal conditions have tended to affect adversely attempts to maintain as efficient a service as could be desired. It is to be recorded, however, that in spite of a variety of difficulties, the staff have at all times responded cheerfully, applying themselves diligently to the work which at the present time involves considerable unrewarded overtime.

The following table covers some of the details of the year's work, which shows an appreciable increase in total, roughly about 25%, over the previous year.

*Commercial Value of work if Minimum Charge Were Made, 1942*

Sputum .....	651	\$ 1.00	\$ 651.00
Diphtheria .....	2,289	1.00	2,289.00
Typhoid Fever .....	437	1.00	437.00
Milks .....	1,108	3.00	3,324.00
Waters .....	3,171	10.00	31,710.00
Miscellaneous Examinations .....	3,750	3.00	11,250.00
Mothers' Milks .....	1	2.00	2.00
Urinalysis .....	95	3.00	285.00
Medico-Legal Examinations .....	5	5.00	25.00
Bloods for Wassermann Test .....	30,851	3.50	107,978.50
Bloods for Kahn Test .....	40,611	3.50	142,138.50
Smears for the Gonococcus .....	7,317	1.00	7,317.00
Van Den Bergh Determination .....	1,511	1.00	1,511.00
Pathological Histological Material .....	6,243	5.00	31,215.00
Blood Smear Examinations .....	124	2.00	248.00
Ascheim Zondek Test .....	314	5.00	1,570.00
Comparative Series .....	18	3.00	54.00
Cerebro-Spinal Fluid Examinations .....	2,099	2.00	4,198.00
Post-mortem Examinations (Bact.) .....	52	5.00	260.00
B. Abortus Examinations .....	436	1.00	436.00
B. Tularensis Examinations .....	436	1.00	436.00
Typhoid Vaccine (10 c.c. quantity) .....	492	.25	123.00
Autogenous Vaccine (25 c.c. quantity) .....	10	5.00	50.00
Poliomyelitis Serum (20 c.c. quantity) .....	12	2.50	30.00
Stock Vaccine (25 c.c. quantity) .....	11	5.00	55.00
Total.....			\$347,593.00
Cattle Blood Examinations .....	1,560	.10	156.00
			<hr/> \$347,749.00

**Report of the Director of Industrial Laboratories, Mr. James A. Kelso**

During the year 4,100 examinations and analyses of approximately 200 different substances were carried out. The following were most frequently tested or analysed: water, malt liquor, milk, wheat, liquor, lubricating oil, rubber gloves, human and animal stomachs, gasoline, barytes, egg powder, coal, brain tissue.

Consultations and the necessary court evidence were given in cases under Dominion and Provincial Acts and as required by the R.C.M.P. and government departments. Investigations were carried out for such departments as the Attorney General, Trade and Industry, Provincial Secretary, in connection with the Fuel Oil Tax Act, Alberta Liquor Control Board, etc.

Many tests were made and investigations carried out for various departments of the Dominion Government in connection with war requirements, particularly for the R.C.A.F. and the Department of Transport, the latter requiring some 215 analyses of water supplies.

Tests of materials of construction and electrical goods were done in conjunction with the Departments of Civil and Electrical Engineering. As usual, weekly control analyses were run for the University of Alberta Power Plant.











REPORT  
OF THE  
BOARD OF GOVERNORS  
AND  
THE PRESIDENT  
OF THE  
UNIVERSITY OF ALBERTA  
1943-44

LIBRARY OF THE UNIVERSITY  
OF ALGERIA

*To the Lieutenant Governor in Council.*

SIR:

On behalf of the Governors of the University of Alberta, and in accordance with section 28 of an Act respecting the University of Alberta, the undersigned have the honour to transmit through the Minister of Education the Report of the University of Alberta, setting forth the revenues and expenditures for the year ending March 31st, 1944, and the investments as they stood at the end of the fiscal year.

Appended to this report is the Report of the President of the University, covering the academic work of the University for the year, July 1st, 1943, to June 30th, 1944.

H. H. PARLEE, *Chairman.*

ROBERT NEWTON, *President.*

November 30, 1944.





# Financial Statement

## UNIVERSITY OF ALBERTA

### BALANCE SHEET AS AT MARCH 31, 1944

#### ASSETS

##### FIXED:

Buildings and equipment in service:		
Land, buildings and plant—Schedule No. 2 .....	\$3,948,303.15	
Furnishings and equipment—Schedule No. 3.....	927,837.75	
		\$4,876,140.90

##### CURRENT:

Cash on hand and in bank .....	\$ 69,809.78	
Accounts and fees receivable .....	\$ 64,221.64	
Less: Reserve for uncollectible accounts .....	2,500.00	
	61,721.64	
Interest accrued .....	1,562.50	
Merchandise held for re-sale .....	29,629.15	
Dominion of Canada debentures .....	10,000.00	
		172,723.07

##### PREPAID EXPENSES:

Supplies on hand .....	\$ 15,257.54	
Unexpired insurance .....	6,904.10	
		22,161.64

##### OTHER ASSETS:

Livestock inventory .....	\$ 24,064.50	
Deposit, Workmen's Compensation Board .....	6,695.99	
		30,760.49

##### DEFERRED CHARGES:

Bond discount .....		193,717.45
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##### TRUST:

	Par Value	Book Value
Investments—Schedule No. 5:		
Dominion of Canada debentures .....	\$175,900.00	\$ 176,029.19
Province of Alberta debentures .....	658,600.00	651,750.09
Province of Alberta debentures, past due .....	15,200.00	15,108.40
Province of Alberta guaranteed debentures .....	7,000.00	7,000.00
Province of Alberta savings certifi- cates, past due .....	3,500.00	3,500.00
Other bonds and shares .....	12,246.66	12,246.66
	\$872,446.66	\$ 865,634.34

Cash on hand in bank .....	167,508.76	
Mortgages receivable .....	21,778.03	
Loans receivable .....	1,723.65	
Real estate and shares, nominal value .....	15.00	
		1,056,659.78
		<u>\$6,352,163.33</u>

## LIABILITIES

### CAPITAL AND SURPLUS:

Advanced by the Government of the Province of  
Alberta:

Balance at April 1, 1943 ..... \$4,804,342.19

Add:

Advances for capital assets—Schedule No. 6 ..... 14,210.00

Gasoline testing laboratory ..... 16,658.41

Implementation of guarantee ..... 3,000.00

\$4,838,210.60

Deduct:

Amortization of bond discount \$ 4,674.80

Refund of overpayment ..... 115.52

4,790.32

Balance at March 31, 1944 ..... \$4,833,420.28

Capital surplus—Schedule No. 7 ..... 241,051.58

\$5,074,471.86

### CURRENT:

Treasury Branch overdraft ..... \$ 660.75

Imperial Bank of Canada loan ..... 24,000.00

Accounts payable ..... 65,371.35

Provision for uncompleted buildings ..... 7,000.00

97,032.10

### DEFERRED INCOME:

Fees ..... 13,876.20

### RESERVES:

Wartime adjustments—Schedule No. 8 ..... \$ 39,480.02

Premium on Rockefeller endowment ..... 18,221.66

Unexpended library fees and donations ..... 10,383.11

Blood plasma unit ..... 10,000.00

Rink repairs ..... 8,600.00

Repairs and replacements ..... 7,200.00

Workmen's Compensation Board ..... 7,979.74

Preliminary building expense, architect ..... 3,500.00

Fine arts ..... 1,500.00

Operating ..... 3,258.86

110,123.39

### TRUST:

General endowment, Rockefeller Foundation ..... \$ 500,000.00

Scholarships:

Escheated estates ..... \$181,416.87

General ..... 120,113.76

301,530.63

Research ..... 78,317.14

Pensions and superannuation ..... 56,777.67

General educational purposes ..... 16,092.51

Student grants and loans ..... 20,112.63

Sundry ..... 22,011.06

Amounts administered or held for affiliated organ-

izations and others ..... 61,818.14

1,056,659.78

\$6,352,163.33

Edmonton, Alberta, August 15, 1944.

I have audited the books and records of the University of Alberta for the year ended March 31, 1944.

Operations for the year under review resulted in an excess of revenue over expenditure of \$26,600.04 after carrying to the reserve for wartime adjustments revenues, less direct expenses, of \$27,234.20 in respect of courses provided for military and naval personnel and net profit of \$15,827.39 on dining room operated on behalf of the Royal Canadian Air Force. An amount of \$3,600.00 has been charged against dining room operations for reserves for repairs and replacements. Skating rink rental of \$2,400.00 has been credited to reserve for rink repairs.

Buildings, plant, furnishings and equipment are stated in the Balance Sheet at original cost. No provision has been made for depreciation but University officials are of the opinion that the value of furnishings and equipment has been maintained by additions and renewals from revenue.

Inventories of merchandise for re-sale and supplies on hand are certified as to quantities and prices by officials of the University.

Bond discount and expenses include discount amounting to \$188,832.28 on issues under guarantee in 1914. No provision for amortization of this amount has been made in the attached statements.

Trust investments include Province of Alberta past due debentures and savings certificates of a par value of \$18,700.00. Interest on Province of Alberta direct and guaranteed issues was received during the year at the reduced rates tendered by the Province.

Past due principal on mortgages receivable amounted to \$3,495.92 as at the date of the Balance Sheet.

Capital surplus amounted to \$241,051.58 and arises from the following sources:

Income contributions:

Library .....	\$148,312.25	
General .....	14,012.70	\$162,324.95

Buildings and equipment provided from funds received from Dominion of Canada and Carnegie research .....	87,146.52
Equipment donated and sundry profits .....	19,774.61

\$269,246.08

Deduct: Capital losses on equipment replaced and abandoned .....	28,194.50
--	-----------

\$241,051.58

Provision for uncompleted buildings represents the estimated liability at March 31, 1944, incurred on unfinished construction.

The reserve for wartime adjustments amounts to \$39,480.02. In addition to current provisions totalling \$43,061.59 previously referred to, surpluses of \$14,661.18 in courses provided for Royal Canadian Navy and Royal Canadian Air Force personnel to March 31, 1943, were transferred from trust account. Charges against the reserve consisted of partial cost of construction and equipment of the cafeteria amounting to \$41,039.14 and loss on operation of the cafeteria, \$1,579.57.

In addition to the amount charged to reserve for wartime adjustments for construction of the cafeteria an amount of \$10,000.00 was expended from the proceeds of a grant received from the Dominion of Canada to compensate for the loss of use of the dining room.

The reserve for blood plasma unit represents a grant received from the Government of the Province of Alberta which has not yet been expended for its specified purpose.

Subject to the foregoing remarks, I certify that, in my opinion, the above Balance Sheet is properly drawn up so as to show the true financial position of the University of Alberta as at March 31, 1944, according to information and explanations given to me and as shown by the books of the University, and the accompanying Statement of Revenue and Expenditure correctly sets forth the result of operations for the year ended at that date.

C. K. HUCKVALE, C.A.,  
Provincial Auditor.

UNIVERSITY OF ALBERTA  
STATEMENT OF REVENUE AND EXPENDITURE  
FOR THE YEAR ENDED MARCH 31, 1944

REVENUE

Grants:			
Province of Alberta:			
General .....	\$	551,067.00	
Debt charges, see contra .....		136,287.95	
		<hr/>	
		\$ 687,354.95	
Dominion of Canada:			
Department of Labour for accelerated courses ....		10,000.00	
		<hr/>	
			\$ 697,354.95
Fees, net revenue—Schedule No. 9:			
General .....	\$	221,306.78	
Summer school .....		4,462.87	
Examinations .....		6,467.12	
		<hr/>	
			232,236.77
Interest on Rockefeller Foundation endowment .....			12,500.00
Library fees, see contra .....			6,654.00
Operating departments net revenue as per Statement No. 86 .....			16,329.50
			<hr/>
			\$ 965,075.22

EXPENDITURE

Instructional expense:			
Instructional salaries and direct expenses, net, as			
per Statement No. 85 .....	\$	574,653.29	
Upkeep of buildings—Schedule No. 10 .....		75,934.15	
Administrative salaries and expenses — Schedule			
No. 11 .....		45,166.87	
Library salaries and expenses—Schedule No. 12 .....		15,674.07	
Pensions arrears .....		4,801.77	
Physical Education—Schedule No. 14 .....		2,708.69	
Calendar and scientific publications—Schedule No. 13		3,490.64	
Provost's office—Schedule No. 15 .....		2,160.60	
Provision for library extension, see contra .....		6,654.00	
Sundry .....		892.23	
		<hr/>	
			\$ 732,135.71
Public service departments net expenditure as per Statement No. 87			70,051.52
			<hr/>
			\$ 802,187.23
Debt charges, see contra .....			136,287.95
			<hr/>
			\$ 938,475.18
Excess of revenue over expenditure for the year ended March 31, 1944			<hr/>
			\$ 26,600.04

DEFICIT ACCOUNT

AS AT MARCH 31, 1944

Balance at April 1, 1943 .....	\$	25,968.00	
Deduct:			
Grant from Department of Labour, applicable to 1942-43	\$5,000.00		
Overprovision for uncompleted building and repairs ....	2,262.33		
Sundry adjustments of previous year's transactions .....	364.49		
		<hr/>	
			7,626.82
			<hr/>
			\$ 18,341.18
Deduct:			
Excess of revenue over expenditure for the year ended March			
31, 1944 .....		26,600.04	
		<hr/>	
			\$ 8,258.86
Surplus appropriated to:			
Reserve for Fine Arts .....	\$1,500.00		
Operating reserve .....	3,258.86		
Reserve for preliminary building expense .....	3,500.00		
		<hr/>	
			8,258.86
			<hr/>
Balance at March 31, 1944 .....			<hr/>

*To the Board of Governors  
of the University of Alberta.*

GENTLEMEN:

I have the honour to submit the following report of the work of the University of Alberta for the year ending June 30th, 1944.

ROBERT NEWTON,  
*President.*





## *The Report of the President*

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We have completed a fifth wartime session, and the important part the universities play in sustaining the nation during this prolonged strain is becoming more evident all the time. On the military side, the University of Alberta has given some 1,700 of her sons and daughters, most of them at least partially trained in the arts of war, many of them with some special knowledge or skill of particular use in the armed forces. (See Table I appended to this report.) During the past session, the Canadian Officers' Training Corps, the University Air Training Corps, the University Naval Training Division, and the Women's War Services all carried out full programmes of training with different groups of our regular students, who carried this load in addition to their ordinary academic studies. This year the women students for the first time provided their own Service training instructors from among those trained in earlier years, all acting under the general direction of Major Owen.

The University has also trained many enlisted personnel for particular Services. This year alone we had 415 naval ratings, for periods of three to four months, training as radio and electrical artificers; and 60 students in No. 2 Canadian Army University Course, taking a slightly modified first-year engineering programme, fitting themselves to become technical officers.

Finally, on the military side, the University has made available to the war effort the full resources of its laboratory facilities and the professional skill of its staff in directing research. As a special service there has been organized this year in the Department of Biochemistry a blood serum laboratory, where blood donations from all over the province are put through the initial stages of processing for shipment to the Armed Forces. The Edmonton blood donors' clinic is under the direction of the wives of two members of the University faculty (Mrs. Hunter and Mrs. Collins), another illustration of the essential part in the war effort played by women.

Not a few members of the staff have been lent to the Dominion government, some for the "duration" and others for shorter special missions. An example of the latter during the past year was Dean Sinclair's 5-week visit to Washington as a member of the panel of experts drafting for the United Nations a permanent scheme for implementing the recommendations of the Hot Springs Conference on Food and Agriculture. Happily the time has come when some of the men on longer missions can also return to their duties in the University without prejudice to the war effort. We are glad to welcome back this summer Professor George Smith, Dean of the Faculty of Arts and Science, Lt. Col. Strickland, Professor of Entomology, and Lt. Cmdr. H. E. Smith, Associate Professor of Education and Director of the Summer Session.

But totalitarianism is not simply a military problem, and universities cannot be content with contributions to the military effort alone. If we are to safeguard the

future, and avoid the necessity of periodically defending our liberties with armed force, we must also win the war of ideas. We therefore commend the Canadian policy, more liberal in this respect than that of some of our allies, of maintaining at least a nucleus of humanitarian studies in our universities. True, the number of students taking the B.A. course has declined from 258 in 1939-40 to 107 this year, and must be expected to decline still further under the imperative demand for manpower drafted from so-called "non-essential" groups. (You will recognize that "non-essential", as applied to students in the liberal arts, has a very restricted meaning, valid, if at all, only in the immediate present, since if the things for which these students stand were allowed to perish from the earth, there would be little left worth fighting for.) But the preservation of the framework of the Arts course, and a nucleus of carefully selected students, will greatly facilitate the restoration of balance after the war.

Meanwhile, I am pleased to report that the total registration for the year is slightly though not significantly greater than that of last year, 2,023 this year as compared with 2,015 last year. This year's figure includes the 60 enlisted engineering students I mentioned, taking No. 2 Canadian Army University Course, but not the 415 naval ratings who took approximately a half-session course. The figure does include 60 graduate nurses who took new short courses of 10 to 12 weeks, in Public Health, Practical Obstetrics, and Administration of Smaller Hospitals. Once again Alberta has pioneered in providing advanced training looking to the betterment of public services.

Two other new short courses, not included in the registration figure but interesting for their timeliness, were one for officers administering the Veterans' Land Act, given by the Faculty of Agriculture, and another for mining prospectors, sponsored jointly by the University and the North West Chamber of Mines and Resources.

A sign that the war programme is nearing its fulfilment comes with the announcement that the Dominion Government, in consultation with the Canadian Association of Medical Colleges, agrees that acceleration of medical courses may now be gradually abandoned. The Canadian Dental Association has reached a similar decision. New students in Medicine and Dentistry, and those who have just completed their first year, will begin their next session at the usual time in September. Those in 3rd, 4th, and 5th years will, however, begin on June 1. Three more sessions of 8 months in the space of 2 calendar years will see the entire accelerated programme through. Both staff and students will be relieved from a strain only justified by war conditions, and which is not conducive to the best quality of work. Meanwhile, the staff in particular have earned our gratitude for a valiant and successful effort to fill the critical needs of the war period.

It is the responsibility of a university not only to teach what is known but also to add to the store of new knowledge. Research activity may be gauged mainly by the number of graduate students. While this registered a further decline owing to war conditions and the rule that only those students are permitted to do graduate work who are engaged in research in support of the war effort, there were still 63 engaged in full-time work of this kind, and 11 others taking special graduate courses. The war has brought public awakening to the practical value of research. No less than 11 commercial companies, whose collective interests cover the whole country, have made grants this year in aid of research here on problems in which

they are interested. Then we have had notable financial support from the National Research Council, the Research Council of Alberta, the Rockefeller Foundation, the Carnegie Corporation, as well as from Dominion and Provincial departments. Thirty-six scientific articles have been published by the staff during the year, and 22 articles of a more popular nature. Special recognition has come to the work of Dr. John Allan, Professor of Geology, who has been elected Regional Vice-President for North America of the Society of Economic Geologists, a world association with one vice-president for each of the six continents.

But productive scholarship does not end with the natural sciences. Rather, as I have already hinted, it is more safely based when it begins with the humanities and social sciences. It is a pleasure to report 15 scholarly contributions in these fields during the past year. I should like to mention two by name. The first volume of Professor Morden H. Long's projected 3-volume work entitled "A History of the Canadian People" appeared more than a year ago. It set a standard which promises for us not only a delightful narrative but also an authoritative reference. It is characteristic of Professor Long's devotion to scholarship that he now proposes to take a year off at his own expense to pursue his historical researches and complete the second volume of his set. The other work I should like you to notice is the little book lately published by Professor John Macdonald, entitled "The Expanding Community, a Political Philosophy for Today". Here indeed is *multum in parvo*, many problems analysed in small compass, but in the still small voice of the scholar and the satisfying light of reason,

Many students have been helped again this year by grants provided in equal shares by the Dominion and Provincial Governments. This is practical recognition of the special value of university training in wartime. We are also grateful to the Kellogg Foundation for renewing their financial support for the same purpose. These special grants, however, seem likely to lapse with the war, and action now is desirable to ensure that their demonstrably good results are maintained in the post-war period through some more permanent scheme in which it is hoped the Federal Government will participate. Meanwhile it is encouraging to have private individuals coming forward in greater numbers and more liberally than hitherto. Substantial scholarships have been endowed in perpetuity this year by Viscount Bennett, of Calgary and Mickleham, by Standard Investments Limited (through the good offices of Mr. H. H. Parlee, K.C., Chairman of the Board of Governors), and by the late Dan Baker, of Edmonton. Other new scholarships have been established on an annual basis, such as the Doctor D. S. Macnab Bursary, founded by the Calgary Associate Clinic, and the scholarships in Applied Science supported by the Canadian Western Natural Gas, Light, Heat & Power Co., Ltd.

Prominent among the University's efforts to promote a finer cultural life in the Province is the Banff School of Fine Arts, which has prospered through both peace and war. Over 200 students, drawn from nearly all provinces and many states, attended the eleventh session last summer. A selection of students' work in the Applied Arts section, sent by special invitation to the Royal Canadian Academy exhibition in Montreal, won the special prize for a corporate exhibit against all comers.

Fortunately our Department of Extension is able to follow through many of the projects initiated in Banff. This year a new community art school was held in

Edmonton, in addition to the one already established in Lethbridge. The Edmonton school, held at the University September 6 to 18, with Mr. H. G. Glyde and Mr. W. J. Phillips, of the Institute of Technology and Art, as instructors, was attended by 56 students. It led to the establishment of a University Art Class which Mr. Glyde came from Calgary once a month to coach. An exhibit of its work is now displayed in the upper hall of the Arts Building (May 16, 1944).

Similarly, with Mr. Sydney Rick back from his year of post-graduate training in drama at Cornell University, under a Rockefeller Foundation Fellowship, the work in the Drama section at Banff last summer has been followed by a very active province-wide programme. Advice on problems in dramatic production has been given to 60 persons in conference, and to ten times that many by letter. Weekly radio talks have carried community producers progressively through all the tricks of their trade, and monthly issues of the publication called "Stage Door" have provided a forum knitting together the whole group. Finally a series of 21 half-hour plays, mostly by Alberta writers, broadcast over CKUA, demonstrated many of the possibilities of this form of art.

The work in drama has been powerfully supported and stimulated, both at the Banff School and afterwards, by the presence and work of Mr. Robert Gard. Through a generous gift from the Rockefeller Foundation we have been able to secure Mr. Gard for a period of three years to direct the Alberta Folklore, Local History and Creative Writing project. Here we have the best of all raw materials out of which to create drama and other literature indigenous to Alberta. Public response to our request for co-operation in collecting such materials was immediate and enthusiastic.

The one place where our follow-up of Banff work is weak is in the realm of music. Mr. Max Pirani lays a good foundation at Banff, but it ends there. Just as soon as possible we must get a director of music to complete our adult education programme in the fine arts. Here in the University we have a unique opportunity for public education through our radio voice, which we should not fail to use to best advantage. Though the radio station has lately been turned over to the Provincial Department of Telephones, we are fully assured of the right to its continued educational use.

Adult education is of course a two-way process. There must be eager students as well as competent teachers. Every graduate is a member of Convocation, and with six or seven thousand of us scattered throughout the land, we should be able to inoculate the whole citizenry with a zeal for enlightenment, an enthusiasm for self-improvement.

Speaking of adult education, I should like to interpolate here one further remark, namely, that in "The New Trail", under the capable editorship of Professor F. M. Salter, I feel that the University speaks through the printed page with a regular and authentic voice.

As the war approaches its climax, preparations to meet post-war problems take an increasing share of our time and thought. The library is collecting and holding material for replacing sets lost by European libraries through war damage. Unfortunately the lack of storage space limits that activity. A new survey course is under development in the Faculty of Law which will be especially useful as a refresher course for law graduates returning from the armed forces. In the



Department of History a new course on the political and social development of Russia from earliest times to the present will be offered next year. This is a step in preparation for the wider political and commercial contacts Canada is bound to have. A sort of Gallup poll survey of the 60,000 or more potential university students now in the armed forces of Canada indicates that more of them desire to follow courses in commerce and business than in all other schools and faculties combined. This means we must strengthen our School of Commerce as rapidly as possible.

The physical problem of accommodating sharply increased numbers of students after the war, when part of the regular crop of matriculants will no longer be diverted to war services and when large numbers of older students will be returning under the Dominion rehabilitation programme, should be considerably relieved by the proposal put forward tentatively by the University Survey Committee two years ago, and now quite definitely by the Alberta Post-War Reconstruction Committee, that the University should establish a junior college in Calgary, accommodated in the buildings of the Normal School and the Institute of Technology and Art. A glance over the record of University students giving their home addresses as Calgary or Edmonton during the past several years shows approximately three times as many from the northern city. True, a number of students who are on their own may give Edmonton as their address when they are not ordinarily resident here. The fact remains that many more Edmonton than Calgary young people attend the University because it happens to be in their home city. The proposed junior college should largely restore equality of opportunity.

Among other important recommendations bearing on education, included in the interim report of the Post-War Reconstruction Committee tabled at the last session of the Legislature, was one that all teacher-training in the Province should be integrated with the University Faculty of Education. All teachers would be considered as pursuing a four-year course leading to the degree of Bachelor of Education. Many would interrupt their course at the end of two years, to become practising teachers. But the philosophy underlying the proposed new system of training is that all teachers, whether of elementary, intermediate, or senior grades, stand equally in need of the highest qualifications, and should be encouraged by adequate salary and other inducements to proceed to a university degree. The first demonstration of integration will come this summer, when the former two separately conducted summer schools of the University and the Department of Education will operate as one. When war conditions permit the Normal School buildings to be reoccupied, it is hoped to bring the entire scheme into operation. Here again Alberta pioneers along progressive lines.

I am glad to say that several members of the University staff were able to help the Post-War Reconstruction Committee with technical aspects of its work. Professor Andrew Stewart's report on rural electrification in Alberta and Professor K. F. Argue's special committee report on teacher training and selection were so substantial in scope and value as to be worthy of special mention.

The opening of the University cafeteria on March 8 has been stated by some people to be the most important event on the campus for twenty years. That statement reflects the general relief and satisfaction which it brought. Not only does it provide much-needed eating facilities, but it replaces in considerable measure



the social centre which was lost to the University with the taking over of the residences for war purposes three years ago. In the cafeteria there already hang three gift pictures. The one by Mrs. Dorothy Henzell Willis was presented by the artist. Those by Alban J. Cartmell and Roland Gissing were the gift of this year's graduating class.

In closing, I should like to thank all members of the staff for splendid co-operation during another abnormally strenuous year. Early in the session we lost one of our most faithful and beloved members in the passing of Professor Wilfred Ernest Cornish, acting head of the Department of Electrical Engineering. His influence will carry on for a long time.

The Chairman and members of the Board of Governors have supported us loyally and generously, giving much time and thought to university business, at inevitable expense to their own. On behalf of the University staff and myself personally I thank them sincerely.

Appended to this report are tabular data concerning enlistments; staff numbers; appointments and promotions; return from war service; resignations and enlistments; student registration; gifts; new scholarships and prizes; staff publications; and reports of the Deans, Directors, Librarian, Provost, and Commanding Officers of military training units.

**Table I.—Students and Staff of the University of Alberta Serving  
in the Armed Forces**

Graduates, Men .....	1,076
Casualties .....	24
Missing .....	4
Prisoner of War .....	4
Graduates, Women .....	62
Undergraduates, Men .....	495
Casualties .....	32
Missing .....	18
Prisoner of War .....	5
Undergraduates, Women .....	8
Academic Staff .....	38
Administrative Staff .....	14
<hr/>	
Total Enlistment* .....	1,693
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\*This list was compiled on May 8, 1944, and does not include the 37 medical students enlisted in the R.C.A.M.C. or the 60 members of No. 2 Canadian Army University Course.

**Table II.—Staff Numbers**

Following are statistics with reference to the academic staff during the year:

*Full-Time Teaching Staff:*

Professors .....	49	
Associate Professors .....	15	
Assistant Professors .....	21	
Lecturers .....	21	
Instructors .....	13	
Demonstrators and Assistants .....	2	
	—	121

*On War Service:*

Professors .....	1
Associate Professors .....	1
Assistant Professors .....	4
Lecturers .....	4

*Part-Time Teaching Staff:*

Professors .....	17	
Associate Professors .....	2	
Assistant Professors .....	11	
Lecturers .....	18	
Instructors .....	47	
Demonstrators and Assistants .....	28	
Student Assistants .....	62	
	—	185

*On War Service:*

Assistant Professors .....	2
Lecturers .....	4
Instructors .....	17
Demonstrators .....	3

*Department of Extension:*

Director .....	1	
Assistants .....	3	
Librarian .....	1	
Rockefeller Fellow .....	1	
	—	6

*Department of Industrial Research:*

Research Professor .....	1	
Assistant Research Professor .....	1	
Research Chemist .....	1	
Chemist .....	1	
Compiler .....	1	
Assistant Chemists .....	4	
	—	9

*Industrial Laboratories:*

Director .....	1	
Assistant .....	1	
	—	2

*Library:*

Librarian .....	1	
Assistant Librarians .....	2	
	—	3

Total Academic Staff .....	326
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**Table III.—Academic Staff Appointments and Promotions**

*Faculty of Arts and Science:*

Robert Kay Gordon, B.A., M.A., Ph.D., Acting Dean of the Faculty of Arts and Science during Dean Smith's absence.

\*John Thomas Jones, M.A., B.A., from Assistant Professor to Associate Professor of English.

\*Dennis McNeice Healy, B.A., Dip. d'Et. Sup., L-es-L., from Lecturer to Assistant Professor of Modern Languages.

Walter Hugh Johns, B.A., Ph.D., from Lecturer to Assistant Professor of Classics.

Richard Birnie Miller, M.A., Ph.D., from Lecturer to Assistant Professor of Zoology.

John Lewis Morrison, M.Sc., Ph.D., from Lecturer to Assistant Professor of Chemistry.

Erich Mueller, M.A., Ph.D., from Lecturer to Assistant Professor of Modern Languages.

Clarence Rupert Tracy, B.A., Ph.D., from Lecturer to Assistant Professor of English.

\*Edward Joseph Hollingsworth Greene, M.A., from Instructor to Lecturer in French.

\*Lewis Gwynne Thomas, M.A., from Instructor to Lecturer in History.

Max Wyman, B.Sc., Ph.D., Lecturer in Mathematics.

James Charles Nichol, B.Sc., Sessional Instructor in Chemistry.

Iris Mary Werry, B.A., Sessional Instructor in French.

*School of Commerce:*

Francis George Winspear, C.A., from Assistant Professor to Professor of Accounting.

Walter Gordon Skinner, C.A., Sessional Instructor in Accounting.

*School of Household Economics:*

Hazel McIntyre, B.Sc., M.S., from Lecturer to Assistant Professor of Household Economics.

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\*On War Service.

### *Faculty of Agriculture:*

Laird Ward McElroy, B.Sc., M.Sc., Ph.D., Assistant Professor of Animal Science.

\*Vladimir Ignatieff, B.Sc., M.Sc., Ph.D., from Lecturer to Assistant Professor of Soils.

Walter Lewis Dunkley, M.Sc., Ph.D., from Sessional Assistant to Lecturer in Dairying.

### *Faculty of Applied Science:*

John Wardlow Porteous, B.Sc., from Assistant Professor to Associate Professor of Electrical Engineering, and Acting Head of the Department of Electrical Engineering.

George Wheeler Govier, B.A.Sc., from Lecturer to Assistant Professor of Chemical Engineering.

Ewald Oscar Lilge, M.Sc., from Lecturer to Assistant Professor of Mining and Metallurgy.

William Walford Preston, B.Sc., from Lecturer to Assistant Professor of Drawing and Descriptive Geometry.

Leroy Allan Thorssen, B.Sc., from Lecturer to Assistant Professor of Civil Engineering.

Allan Douglas Hogg, B.Sc., M.Sc., Ph.D., Lecturer in Mechanical Engineering.

Elio D'Appolonia, B.Sc., from Demonstrator to Instructor in Civil Engineering.

George Ford, B.Sc., from Demonstrator to Instructor in Civil Engineering.

Sub-Lieutenant Merwin Russell Hannah, B.Sc., Sessional Instructor in Electrical Engineering. (On loan from R.C.N.V.R.)

Ralph Norman McManus, B.Sc., from Demonstrator to Instructor in Civil Engineering.

Frederick McPherson, B.Sc., from Demonstrator to Instructor in Civil Engineering.

Maurice Stephen Mitchell, B.Sc., Demonstrator in Civil Engineering.

### *Faculty of Medicine:*

Heber Carss Jamieson, M.B., F.R.C.P.(C), from Associate Professor to Professor of Clinical Medicine.

John William Scott, M.D., C.M., F.R.C.P.(C), from Associate Professor to Professor of Clinical Medicine.

Maxwell Mordcai Cantor, B.Sc., M.D., F.A.C.P., from Assistant Professor to Associate Professor of Biochemistry.

Nesbitt Edgar Alexander, M.D., F.A.C.S., from Lecturer to Assistant Professor of Clinical Surgery.

Roy Llewellyn Anderson, M.D., F.R.C.S.(C), F.A.C.S., from Lecturer to Assistant Professor of Clinical Surgery.

\*Robert Kenneth Colquhoun Thomson, B.Sc., M.D., from Instructor to Lecturer in Clinical Medicine.

Donald Gordon MacQueen, M.D., F.A.C.S., Instructor in Clinical Surgery.

Louis Philippe Mousseau, M.D., Instructor in Clinical Surgery.

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\*On War Service.

Flight Lieutenant William Alexander Shandro, M.D., C.M., F.A.C.S., Instructor in Clinical Surgery.

Margaret M. Hutton, B.A., M.D., Sessional Demonstrator in Obstetrics and Gynaecology.

*School of Dentistry:*

William Alexander Johnstone, Instructor in Peridontia.

James Donald Hawkins, Instructor in Operative Dentistry.

*School of Nursing:*

\*Agnes Jean Macleod, B.A., B.Sc., M.A., R.N., from Lecturer to Assistant Professor of Nursing.

Madeline Leila McCulla, B.Sc., M.A., R.N., Lecturer in Nursing, and Acting Director of the School of Nursing.

Barbara Whittaker Eben-Ebenau, B.A., R.N., C.M.B., Sessional Instructor in Obstetrics.

*School of Pharmacy:*

Rose Wannop, B.Sc., Sessional Instructor in Pharmacy.

*Department of Extension:*

Robert Edward Gard, A.B., M.A., for the study of Alberta Folklore and Local History, under a grant from the Rockefeller Foundation.

Frank Wayne Peers, B.A., B.Ed., Assistant to the Director.

**Return to Duty from War Service**

Allan Coats Rankin, C.M.G., M.D., C.M., D.P.H., F.R.C.P.(C), Dean of the Faculty of Medicine.

Edgar Harold Strickland, M.Sc., Professor of Entomology and Head of the Department.

Herbert Edgar Smith, B.A., M.A., B.Ed., Ph.D., Associate Professor of Education.

**Resignations and Enlistments**

Ernest Hay Watts, B.A., M.D., Lecturer in Anaesthesia, leave of absence for war service.

Ronald Edward Phillips, B.Sc., Lecturer in Electrical Engineering, resigned to enlist in R.C.N.V.R.

Cyril Kenway, B.Sc., Acting Agricultural and Radio Secretary, resigned.

George Malcolm Smith, M.C., B.A., M.A., Dean, Faculty of Arts and Science, leave of absence for war service.

John Albert McPherson, M.B., Lecturer in Clinical Surgery, retired.

Frederick S. Colman, D.D.S., Instructor in Prosthetic Dentistry, resigned.

Norman Llewellyn Terwillegar, M.B., Lecturer in Clinical Surgery, resigned.

Helen Griffith McArthur, B.Sc., M.A., R.N., Acting Director of the School of Nursing, resigned.

Robert Graham Huckell, M.D., C.M., F.A.A.O.S., Assistant Professor of Orthopaedic Surgery, leave of absence for war service.

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\*On War Service.

**Table IV.—Registration by Faculties**

As distributed in the various faculties and schools the numbers are as follows:

Total Registration .....	2,023		
	Men	Women	Total
1. Arts and Science .....	239	276	515
	Men	Women	Total
B.A. ....	31	76	107
B.Sc. ....	99	58	157
School of Commerce .....	19	13	32
School of Household Economics .....	.....	107	107
Combined Courses:			
B.Sc., M.D. ....	64	6	70
B.Sc. and/or D.D.S. ....	11	2	13
B.A., LL.B. ....	6	1	7
B.A., B.Ed. ....	2	9	11
B.Sc., B.Ed. ....	3	3	6
B.Com., B.Ed. ....	1	1	2
Special .....	3	.....	3
2. Applied Science .....	368	1	*369
3. Agriculture .....	65	1	66
4. Law .....	17	.....	17
5. Medicine .....	280	199	479
	Men	Women	Total
Medicine .....	126	14	140
Dentistry .....	52	1	53
Pharmacy Degree .....	7	4	11
Pharmacy Diploma .....	5	4	9
Nursing Degree .....	.....	78	78
Nursing Diploma .....	.....	88	88
Diploma in Public Health .....	.....	2	2
Adjustment of ½ accelerated course in Medicine and Dent- istry, Feb. to Aug., 1943 .....	90	8	98
6. Education .....	46	73	119
	Men	Women	Total
B.Ed. ....	11	46	57
B.A., B.Ed. ....	2	1	3
B.Sc., B.Ed. ....	3	.....	3
Graduates proceeding to B.Ed. ....	3	4	7
Partial .....	23	11	34
Accelerated Education, May, 1943 .....	4	11	15
7. Divinity .....	10	.....	10
8. Summer Session (1943) .....	167	158	325
9. Short Courses .....	35	64	99

\*Not including Naval personnel listed in Table VIII.



	Men	Women	Total
Creamery Short Course (inex- perienced, 9 weeks) .....	8	4	12
Creamery Short Course (experi- enced, 4 weeks) .....	27	.....	27
Nurses (Public Health, 10 weeks) .....	.....	45	45
Nurses (Practical Obstetrics, 12 weeks) .....	.....	4	4
Nurses (Administration of Smaller Hospitals, 11 weeks)...	.....	11	11
10. Graduate Students .....	63	11	74
	Men	Women	Total
Arts and Science:			
M.A. ....	13	2	15
M.Sc. ....	11	1	12
Education:			
M.Ed. ....	17	1	18
M.A. ....	1	.....	1
Applied Science .....	4	.....	4
Agriculture .....	13	.....	13
Special .....	4	7	11
11. Auditors .....	10	4	14
Total.....	1,300	787	2,087
Less duplicates .....	39	25	64
	1,261	762	2,023

**Table V.—Gifts**

From the National Research Council to the Department of Field Crops, \$13,300; to the Department of Soils, \$275; for war projects in other departments, \$7,260.47.

From the "Friends of the University": 132 individual members, \$2,150.32; Mrs. Dorothy H. Willis, a picture for the Cafeteria; Burns and Co., Ltd., \$500 for research work in the Department of Animal Science; Canadian Western Natural Gas, Light, Heat and Power Company, Limited, \$1,200 for scholarships in the Faculty of Applied Science.

From an anonymous donor, \$45,000 to set up an "Agricultural Research Trust Fund".

From the Dominion Department of Labour, \$10,000 for accelerated courses in Medicine and Dentistry.

From an anonymous donor, \$7,500, credited to Fine Arts.

From the Rockefeller Foundation, \$3,500 in support of the Alberta Folklore and Local History Project.

From the Canadian Broadcasting Corporation, \$2,500 to assist the educational programme of Radio Station CKUA.

From John Wyeth and Brother (Canada) Limited, \$2,000 for research work in the Department of Biochemistry.

From Ciba Company Limited, \$1,000 for research work in the Department of Biochemistry.

From the Goodyear Tire and Rubber Company, \$1,000, credited to Fine Arts.

From Canada Malting Company Limited, \$1,000 for research work in the Department of Field Crops.

From the United Grain Growers Limited, \$1,000 for research work in the Department of Field Crops.

From Naugatuck Chemical, \$800 for research work in the Department of Field Crops.

From Merck and Company Limited, approximately \$400 of supplies for research work in the Department of Animal Science.

From Mrs. J. H. Woods, \$500 to assist Dr. R. B. Sandin's cancer research work; the late Colonel Woods' LL.D. gown.

From the Alberta Dental Association, \$200 towards the establishment of a photographic department in the School of Dentistry.

From Mr. W. J. Bown, the late J. C. F. Bown's LL.D. gown; 22 volumes on music and several scores.

From the Philosophical Society, \$81.00 to the Library for the purchase of books.

Through the intervention of Major General W. W. Foster, and with the permission of the Commanding General, Northwest Service Command, set No. 4 of the Norman Wells Fossil Collection and Fossil Accession Index.

From Mr. R. W. Ross, a collection of stone implements for the Museum.

From Mrs. J. McCaig, 200 specimens of minerals and fossils for the Department of Geology.

From the Class of 1944, two pictures, one by Alban J. Cartmell, the other by Roland Gissing.

From Dr. M. R. Levey, a picture by James McLaren Nicoll.

From Mr. J. W. Hugill, 233 volumes for the Dean Weir Memorial Law Library.

From Mr. Charles Becker, 295 volumes from the library of the late Mr. R. Andrew Smith, K.C., for the Dean Weir Memorial Law Library.

From the Canadian Pharmaceutical Association, 19 volumes of the Proceedings of the American Pharmaceutical Association.

From Mrs. A. D. Irvine, books on radiography and X-ray from the library of the late Dr. A. D. Irvine.

From Dr. W. G. Anderson, United States Department of Agriculture Yearbooks, 1894 and 1896, from the estate of Mr. H. S. Jackson.

From the Canadian National Railway System, two volumes of Engineering Reports on the Quebec Bridge.

From Lieutenant R. W. Ross, £6 for The New Trail.

From Miss Margaret L. Carrick, the late Dr. G. W. Kerby's LL.D. gown.

From the Graduate Society of McGill University, a plastic plaque of the Canadian Coat of Arms.

#### **Table VI.—New Scholarships, Prizes and Medals**

The Viscount Bennett Prizes and Scholarships are provided by a trust founded by the Right Honourable Viscount Bennett, P.C., K.C., LL.D., D.C.L., of Calgary and Mickleham. For the year 1944-45, ten scholarships of \$300 each will be available for award.

The President's Scholarships have been endowed by a fund donated by Standard Investments Limited, through Mr. H. H. Parlee, Chairman of the Board of Governors. One scholarship of \$300 will be available for 1944-45.

The Gas Company Undergraduate Scholarships of \$600 each, founded by the Canadian Western Natural Gas, Light, Heat, and Power Company, Limited, are available for award to two second-year students in the Faculty of Applied Science, to be held during their third and fourth years, \$300 to each student per year.

The Dr. D. S. Macnab Bursary, \$250, founded by the Calgary Associate Clinic, is available to undergraduates or recent graduates of the Faculty of Medicine.

The Dan Baker Scholarships are provided under the terms of the will of the late Dan Baker of Edmonton. In 1944-45, one scholarship of \$100 will be available for award to a student in the Faculty of Agriculture.

The N. I. McDermid Memorial Prize in Pharmacy, the \$50.00 initial licensing fee requisite to membership in the Alberta Pharmaceutical Association, is offered by the McDermid Drug Company, Limited, Calgary.

The Cecil Ethelbert Race Memorial Scholarship, \$25.00, offered by the Institute of Chartered Accountants of Alberta, is available for award to a student in the School of Commerce.

The Institute of Chartered Accountants Scholarship, \$25.00, is offered to a student in the School of Commerce.

The H. R. Webb Memorial Prizes, offered by the Association of Professional Engineers of Alberta to one graduating student in each of the civil, electrical, mining, and chemical engineering departments, have been increased from \$25.00 to \$50.00 each.

Henry Birks and Sons, Limited, Edmonton, offer a gold medal to a graduating student in the Faculty of Applied Science.

Dr. Joseph L. Choate, Beverly Hills, California, has donated a scholarship of \$75.00 to a student in the Art Division, Banff Schools of Fine Arts.

Mr. James Brewster, Banff, has donated two scholarships to the value of a week's hospitality at Sunshine Lodge to students in the Art Division, Banff School of Fine Arts.

The Consolidated Mining and Smelting Company of Canada Limited have provided a fellowship of approximately \$525 for research in the Department of Animal Science.

#### **Table VII.—Publications by Staff**

##### *Department of Accounting:*

Winspear, F. G. Some comments on the new bookkeeping system. *Western Mun. News*, August 1943.

##### *Department of Anatomy:*

Shaner, R. F. The scholar as teacher. *Sci. Mon.* 58:321-324. 1943.

##### *Department of Animal Science:*

Sackville, J. P. The place of the purebred breeder in livestock production. *Shorthorn News*, December 1943.

Sackville, J. P. Meeting wartime protein shortages. *Western Producer*, November 1943.

Sinclair, R. D. Shorthorns in the post-war era. *Shorthorn News*, June 1943.

- Clandinin, D. R. Synthetic riboflavin for poultry. *Am. Miller*, October, 1943.  
 Clandinin, D. R. Meeting the riboflavin needs of poultry. *Am. Miller*,  
 November 1943.  
 Clandinin, D. R. Vitamins for poultry. *Alta. Poul. Fed. Cat.* 1944.

*Department of Biochemistry:*

- Cantor, M. M. Standardization, action and administration of the sex steroids.  
*Western Druggist* 12:12-18. 1943.  
 Cantor, M. M. Physiologic conceptions of sex hormone therapy. *Western*  
*Druggist* 12:20-23. 1943.  
 Cantor, M. M. "Balance" and the vitamin B complex—a discussion of biological  
 function. *Western Druggist* 12:24-30. 1943.  
 Cantor, M. M. Evaluation of hepatic function. *Bull. Vancouver Med. Assoc.*  
 19:316-323. 1943.  
 Cantor, M. M. Sex steroids in general medical practice. *Bull. Vancouver Med.*  
*Assoc.* 20:21-28. 1943.  
 Tuba, J., Hunter, G., Hutchinson, M. J., and Kennedy, L. L. On sources  
 of vitamin C, I. Rose hips. *Can. J. Res. C* 21:363-373. 1943.  
 Tuba, J., Hunter, G., and Kennedy, L. L. On sources of vitamin C, II  
 Alberta native fruits. *Can. J. Res. C* 22:33-37. 1944.  
 Cantor, M. M. Evaluation of renal function. *Bull. Vancouver Med. Assoc.*  
 19:309-315. 1943.

*Department of Botany:*

- Moss, E. H. The prairie and associated vegetation of south-western Alberta.  
*Can. J. Res. C* 22:11-31. 1944.

*Department of Chemistry:*

- Sandin, R. B. Organic compounds of polyvalent iodine. *Chem. Rev.* 32:249-  
 276. 1943.  
 Sandin, R. B., Kitchen, R., and Fieser, L. F. 1,2,9,10-tetramethylantracene.  
*J.A.C.S.* 65:2018-2020. 1943.  
 Rabinovitch, B. S., Davis, S. G., and Winkler, C. A. The reaction of hydrogen  
 atoms with propylene. *Can. J. Res. B* 21:251-257. 1943.

*Department of Civil and Municipal Engineering:*

- Morrison, I. F. A note on a new form of the three-moment equation. *Eng. J.*  
 27:143-145. 1944.

*Department of Dentistry:*

- Hamilton, W. S. Dentistry as a career. *J. Can. Dent. Assoc.* 9:366-368. 1943.  
 Gilchrist, H. A. Mottled enamel. *J. Can. Dent. Assoc.* 9:255-261. 1943.

*Department of Education:*

- Argue, K. F. Should the teacher have all the say? *Alta. School Trustee* 17-19.  
 April 1944.  
 Argue, K. F. A framework for appraising the financing of education in the  
 Canadian provinces. *Can. Coun. Educ. Res.* 1939-43. 61-70. 1944.  
 Argue, K. F. Community reconstruction. *Can. Mineworker.* 6-7. March 1944.  
 Argue, K. F. The growing fringe of education. *Educ. Quart.* 5:13-17. 1943.

Argue, K. F. Quality varies with price. *Alta. Teachers' Assoc. Mag.* 11-15. December 1943.

Argue, K. F. Present and post-war problems in educational reconstruction. *Echoes.* 7-8. December 1943.

LaZerte, M. E. The Canadian Council for Educational Research, 1939-43. A report of activities of the first five years. 79 pp. April 1944.

#### *Department of English:*

Tracy, C. R. The future of the Faculty of Arts. *Queen's Quart.* 1:175-187. 1943.

Gordon, R. K. Scott and Wordsworth's lyrical ballads. *Trans. Roy. Soc. Can.* II 37:113-119. 1943.

#### *Department of Entomology:*

Brown, J. H. Tularaemia in Southern Alberta. *Can. J. Med. Tech* 5(2):55-57. 1943.

Bow, M. R., and Brown, J. H. Tularaemia in the "Seven Person's Coulee", Alberta. *Can. J. Pub. Health.* 415-418. September 1943.

Bow, M. R., and Brown, J. H. Water-borne tularaemia in Western Canada. *Can. Med. Assoc. J.* 50:14-16. 1944.

Brown, J. H. The susceptibility of fur-bearing animals and game birds to tularaemia. *Can. Field. Nat.* April 1944.

Brown, J. H. The siphonaptera of Alberta: A list of the species with hosts and localities. *Ann. Ent. Soc. Am.* 1944.

Brown, J. H. Sylvatic plague: The recovery of fleas from the burrowing owl and its burrow in a plague area in Alberta. *Ent. News* 55(1):15-18. 1944.

Brown, J. H. The spotted fever and other Alberta ticks. *Can. J. Res. D* 22:36-51. 1944.

Brown, J. H., and Roy, G. D. The Richardson ground squirrel (*Citellus richardsonii* Sabine) in Southern Alberta: Its importance and control. *Sci. Agric.* 24(4):176-197. 1943.

Brown, J. H., and Wilk, A. L. The mallophaga of Alberta: A list of the species with hosts. *Can. Ent.* May 1944.

#### *Department of Field Crops:*

Ludwig, R. A., and Henry, A. W. Studies on the microbiology of recontaminated sterilized soil in relation to its infestation with *Ophiobolus graminis* Sacc. *Can. J. Res. C* 21:343-350. 1943.

McCalla, A. G., and Corns, W. G. Effects of variety and environment on the starch content of wheat and barley. *Can. J. Res. C* 21:307-321. 1943.

Sexsmith, J. J., and Fryer, J. R. Studies relating to fertility in alfalfa (*Medicago Sativa* L.). I. Pollen viability as affected by seasonal age of the plants. *Sci. Agri.* 24:95-100. 1943.

Sexsmith, J. J., and Fryer, J. R. Studies relating to fertility in alfalfa (*Medicago sativa* L.). II. Temperature effects on pollen tube growth. *Sci. Agric.* 24:145-151. 1943.

Birdsall, J. E., and Neatby, K. W. Researches on drought resistance in spring wheat. III. Size and frequency of stomata in varieties of *Triticum vulgare* and other *Triticum* species. *Can. J. Res. C* 22:38-51. 1944.

#### *Department of Geology:*

- Allan, J. A. The relation of the geology to the soils in the Rosebud and Banff sheets. Coll. Agric. Univ. Alta, Bull. 40:108-126. 1943.
- Allan, J. A. Geology. Res. Coun. Alta. Rept. 34. pp. 202. 1943. Part I. General geology of Alberta. Part II. Rock salt deposit at Waterways. Part III. Geology of Alberta Soils. Part IV. Relief model of Alberta and its geological application. Part V. Coal areas of Alberta.
- Rutherford, R. L. Note on cyanite from British Columbia. Univ. Toronto Stud. No. 48. Contributions to Canadian mineralogy. 102-103. 1943.
- Warren, P. S. The role of *Sphaerospongia tessellata* in the Mackenzie river Devonian. Can. Field. Nat. 58:28-29. 1944.

#### *Department of Horticulture:*

- Shoemaker, J. S. Horticulture. Can. Legion Educ. Serv. 1. pp. 162. 1943. 2nd ed. 1944. Trans. into French, 1944.
- Shoemaker, J. S. Horticulture. Can. Legion Educ. Serv. 2. pp. 142. 1943. 2nd ed. 1944. Trans. into French, 1944.
- Shoemaker, J. S. Horticulture. Can. Legion Educ. Serv. 3. pp. 155. 1943. 2nd ed. 1944. Trans. into French, 1944.
- Shoemaker, J. S. Horticulture. Can. Legion Educ. Serv. 4. pp. 193. 1943. 2nd ed. 1944. Trans. into French, 1944.
- Shoemaker, J. S. A guide to reading (Horticulture). Can. Legion Educ. Serv. pp. 15. 1944.
- Shoemaker, J. S. Description of selected varieties in University of Alberta test garden. Ann. Can. Gladiolus Soc. 51-63. January 1944.

#### *Department of Mathematics:*

- Cook, A. J. High school geometry and the ability to reason. Bull. Can. Coun. Educ. Res. Abstr. 14. 1944.
- Wyman, M. Review of Einstein, A., and Pauli, W.: The non-existence of regular stationary solutions of relativistic field equations. Math. Rev. 4:226. 1944.

#### *Department of Nursing:*

- McArthur, H. G. The principles involved in staff education. Can. Nurse. 40:115-117. 1944.
- Willis, M., and Eben, B. Better storks for Alberta. Can. Nurse. 40:249-252. 1944.

#### *Department of Philosophy and Psychology:*

- Macdonald, J. The Expanding Community. J. M. Dent & Sons. March 1944.

#### *Department of Physiology and Pharmacology.*

- Rodman, F. B., and Wright, H. N. Physico-chemical properties of the arsphenamines in relation to distribution and retention in the tissues. J. Pharm. Exp. Ther. 79:140-163. 1943.

#### *Department of Political Economy:*

- Stewart, A. Part-time farming in Nova Scotia. Inst. Pub. Affairs, Dalhousie Univ. pp. ii. 51. 1944.



*Department of Surgery and Clinical Surgery:*

- Gillespie, W. F. Physiological principles in the repair of inguinal hernia. Can. Med. Assoc. J. 49:29-33. 1943.  
Anderson, R. L. Failures in inguinal hernia. Can. Med. Assoc. J. 49:392-396. 1943.

*Department of Zoology:*

- Miller, R. B. Studies on cestodes of the genus triaenophorus from fish of Lesser Slave Lake, Alberta. II. The eggs, coracidia, and life in the first intermediate host of Triaenophorus crassus forel and T. nodulosus (Pallas). Can. J. Res. D 21:284-291. 1943.

*Faculty of Law:*

- Newson, F. J. Contracts: Frustration, Chandler v. Webster overruled. Alta. Law Quart. 5:169-174. 1943.  
MacIntyre, M. M. The rationale of separate national sovereignty. Alta. Law Quart. 5:155-168. 1943.  
MacIntyre, M. M. Master's liability to servant—Independent contractor—"Personal negligence." Alta. Law Quart. 5:175-178. 1943.  
MacIntyre, M. M. Misfeasance and nonfeasance—Permissive statutory authority. Alta. Law Quart. 5:183-187. 1944.  
MacIntyre, M. M. Rule against perpetuities—Effect of a void executory limitation upon prior vested interests—Critique of Doe dem Plomfield v. Eyre. Alta. Law Quart. 5:190-196. 1944.  
MacIntyre, M. M. The rationale of imputed negligence. Univ. Toronto Law J. 5:368-382. 1944.

**EXCERPTS FROM THE REPORTS OF ADMINISTRATIVE OFFICERS**

**Report of Dr. R. K. Gordon, Acting Dean of the Faculty of Arts and Sciences**

**1.—Registration.**

During the regular academic session, 1943-44, 515 students were registered in the Faculty of Arts and Science as compared with 582 in 1942-43 and 693 in 1941-42. Registrations have decreased in virtually all sides of the Faculty. The decrease has been most marked among students proceeding to the degree of Bachelor of Arts. The number of students who are candidates for degrees with Honors is declining except in the department of Chemistry.

**2.—Recommendations for degree.**

The number of students recommended for degrees at the Convocation of 16th May, 1944, was as follows:

For the B.A. degree .....	46
For the B.Sc. degree .....	54
For the B.Com degree .....	13
For the degree of B.Sc. in Household Economics .....	29
	<hr/>
	142

### 3.—*Legislation.*

Some changes were made in the B.Sc. in Household Economics course, the chief one being the moving of Chemistry 58 from the third to the second year, so that it might be taken as a co-requisite with Biochemistry 61, and of Chemistry 45 from the second to the first year.

In the B.Sc., M.D. course and the B.Sc., D.D.S. course it was agreed that, beginning with 1944-45, Mathematics 40 should replace Physics 40 in the first year (Physics 40 to go into the second year); that in the second year Physics 42 and 46 be dropped from the list of second year options and that students be allowed to take a senior course in English or History in the second year instead of a further course in French or German.

A new course, History 62—History of Russia—was approved. This will be taught by Professor Collins in 1944-45.

4. Owing to the decline in the number of students reading for Honors, it seems more important than ever to encourage coherent programmes in the General Course and continuity in related fields of study.

5. Following the Christmas term examinations, 59 students in this Faculty (25 women, 34 men), of whom 47 were Freshmen, were reported as having failed to meet the minimum requirements and were therefore required to withdraw. The men were reported to the Mobilization Board as not entitled to further postponement of military service.

6. During the year, all men who were candidates for the B.Sc. degree, except pre-medical and pre-dental students, were registered with the Wartime Bureau of Technical Personnel.

7. Students have again loyally carried out the requirements of the University in respect to training in the C.O.T.C., and the U.A.T.C., the U.N.T.D., and the Women's Auxiliary Corps.

8. Dean Smith has been away on leave of absence since about the middle of October. It need not be said that both as Dean and as Professor of History he has been greatly missed. His return, which is expected towards the end of May, will be most welcome.

### **Report of Professor F. G. Winspear, Secretary of the School of Commerce**

The Committee of the School of Commerce begs to submit this report.

Student registration in the School for the year 1943-1944 was 32, classified as follows:

	Men	Women	Total
First Year .....	6	5	11
Second Year .....	4	5	9
Third Year .....	9	3	12
	—	—	—
	19	13	32

This compares with 51 for the year 1942-1943, 65 for the year 1941-1942, 84 for the year 1940-1941, and 96 for the year 1939-1940. It is notable that the ratio of men to women undergraduates has declined, obviously due to the impact of the war.

During the year the Committee has given some consideration to the possibility of offering a course or courses in industrial management, plant lay-out, engineering and personnel management, and a sub-committee was set up for the purpose of giving the matter further study. The Committee of the School is conscious of an expected large increase in enrollment in the post-war years, and is endeavoring to organize with a view to meeting the situation.

The policy of the School has not changed—it aims to give a basically cultural course with emphasis on accounting, political economy, mathematics and commercial law. As funds become available it is hoped that certain of the cultural courses, such as foreign languages, may be offered for all students before the final year, so that in the final year's work the student may emphasize specialized professional topics.

The graduates of the School continue to be in great demand. Most of the men graduates are of course going into the armed forces, but the specialized training of both men and women is in demand in public accountancy, civil service, and by industrial and commercial concerns.

### **Report of Professor Mabel Patrick, Director of the School of Household Economics**

I beg to submit the following report of the School of Household Economics for the session 1943-44.

Registration for the degrees of B.Sc. and B.H.Ec. this year was the largest to date. Because of the demand for graduates it was deemed advisable to accept all applications for admission to the first year. This involved having three sections of the class. It was unfortunate that nine students were required to withdraw at Christmas, because of national regulations. The registration was as follows:

First year .....	48	
Second year .....	27	
Third year .....	30	
	—	105
Other students following courses in Household Economics:		
H.Ec. 10 (first year Education) .....	7	
H.Ec. 51 (general Arts and Science and Education) .....	7	
H.Ec. 57 (general Arts and Science and Education) .....	6	
H.Ec. 36 (B.Sc. in Nursing, first year):		
First term .....	26	
Second term .....	15	
H.Ec. 62 (B.Sc. in Nursing, fifth year) .....	18	
	—	79
		—
		184

The new Cafeteria which opened in March affords excellent facilities for practical work. The dietitian in charge is a member of the staff of the Department of Household Economics, and it is planned that she will give some instruction in Institutional Management as well as supervising the practical work of the students in the Cafeteria.

The course for the B.Sc. degree in Household Economics was revised this year to meet the prerequisites laid down by the Department of Biochemistry for Biochemistry 61. This is only a temporary solution of the problem. It is hoped that the course may be extended to four years after the war.

This session a class in Household Economics was offered for first year students in the Faculty of Education. Other classes have been arranged for 1944-45. For the first time, classes in Household Economics are being offered at Summer School for students in the School of Nursing and in the Faculty of Education.

The demand for graduates continues to exceed the supply. One student failed to pass her examinations.

### **Report of Dean R. D. Sinclair of the Faculty of Agriculture**

The activities of the Faculty of Agriculture in the University of Alberta may be separated into two main divisions, (1) academic and (2) experimental, and for convenience in presenting this report they will be subdivided under these headings.

However, in addition to teaching and conducting research work the members of the staff of the Faculty of Agriculture engage, as far as time will permit, in extension work and in this way maintain a close contact with the farm population of Alberta. Experimental results are made available to the people by means of lectures at farm meetings, Agricultural Short Courses and Field Days, radio talks, personal interviews, and direct correspondence with individuals who may request information on specific problems. Close co-operation is offered by all Departments to the Department of Extension of the University of Alberta and the Extension Service of the Alberta Department of Agriculture.

#### **1.—Academic.**

During the 1943-44 academic session 65 students were enrolled in the Faculty of Agriculture as compared with a total of 90 for the 1942-43 term. The decrease was due to a smaller number of students entering each year of the four year course. Of the first year students, 9 entered direct from High Schools and 5 from the Provincial School of Agriculture at Olds. One student was admitted to the course in Agriculture under arrangements of the Post-Discharge Re-Establishment Order P.C. 7633. A total of 20 students were registered with courses completing the requirements for the degree of B.Sc. in Agriculture.

The graduating class of 1943 contained the final group of School of Agriculture students to receive the B.Sc. degree upon completing three years work in the University. The "new course", which has been in effect for three years, involves four years of University work following Grade XII from High School or Grade XI and a diploma from a Provincial School of Agriculture.

Students in the Faculty of Agriculture were maintained in the "Science students" category and were subject to the regulation and direction of the Wartime Bureau of Technical Personnel, Department of Labour. Co-operation was extended to National Selective Service in directing undergraduate students to summer employment which would make it possible for them to obtain suitable professional experience and at the same time make the most effective contribution to the war effort. Students of the 1944 graduating class have been enrolled with the Wartime Bureau of Technical Personnel. A strong demand exists for agricultural graduates to render technical services in connection with agricultural production.

Thirteen agricultural students were registered in the School of Graduate Studies and were engaged in research projects regarded as contributing to the successful prosecution of the war. Of this number, six completed the requirements for the M.Sc. degree.

During the year a Creamery Short Course was offered under the joint sponsorship of the Dairy Department and the Dairy Branch of the Alberta Department of Agriculture. The 40 students registered in this course received financial assistance through the Dominion-Provincial War Emergency Training Programme. Experienced students were given the usual one month Creamery Short Course, while those lacking experience received a total of nine weeks' training.

A two day Short Course for officers administering the Veterans' Land Act was held during the month of February. This course was confined mainly to a study of soil problems, although such matters as farm machinery and land clearing received consideration.

No major changes were made in the course of studies during the year.

Professor Strickland and Dr. V. Ignatieff continued on leave of absence in military service during the year. Mr. J. H. Brown, in the position of Sessional Lecturer, assumed responsibility for the academic work in the Department of Entomology, and Mr. A. S. Ward, as Acting Lecturer, substituted for Dr. Ignatieff. Appointments to the staff of the Faculty of Agriculture during the year included Dr. L. W. McElroy, as Assistant Professor of Animal Husbandry, and Dr. W. L. Dunkley, as Lecturer in Dairying.

At the opening of the academic term, Dean R. D. Sinclair was granted a short leave of absence and spent five weeks in Washington, D.C., as a member of a Scientific Panel set up by Committee B of the United Nations Interim Commission on Food and Agriculture and acting in an advisory capacity in relation to the preparation of a working plan for a permanent United Nations organization for Food and Agriculture.

The Faculty of Agriculture is concerned lest there be a lack of lecture room and laboratory accommodation for the increased numbers of students likely to present themselves during the post-war rehabilitation period. Accommodation was taxed to capacity in 1939 when approximately 70 first year students were in attendance. It is earnestly hoped that the Biological Science Building, proposed in the 1942 Interim Report of the University of Alberta Survey Committee, may be erected within the time suggested.

## *2.—Experimental.*

In the Department of Agricultural Engineering, staff shortage and lack of suitable facilities have made it difficult to carry out research on power problems of the farm although the need for investigational work of this nature is fully realized. Considerable time has been devoted to the work of the Western Agricultural Engineering Committee and in acting as Consultant on the Farm Machinery Rationing Appeal Board. The addition of a staff member to the Department to undertake special investigations in farm machinery and farm motors is strongly recommended.

The usual research activities of the Department of Soils were continued during the year with certain modifications necessitated by changes or loss of staff. Inter-



ruption in staff personnel, particularly in relation to soil survey work, has become an acute problem. The soil survey work was supported by and carried out in co-operation with the Dominion Department of Agriculture. An area of approximately 3,000,000 acres was surveyed in 1943, about one-half being on each of the Red Deer and Vermilion Sheets and a smaller area near St. Paul and Cold Lake. Staff and appropriations are inadequate to conduct surveys in the north country where much of the future land settlement must take place. Fertilizer experiments were continued during the year with emphasis upon different rates of fertilizers for grain crops in black soils and comparison of fertilizers, including trace elements, for forage crops grown on gray soils. The Department of Soils participated in the special war project on the production of butylene glycol from wheat, being mainly concerned with fermentation by soil micro-organisms.

The Department of Horticulture found a marked increase in interest in vegetable gardening during the year, and was deluged with requests for information regarding wartime gardens, seed production, dehydration, frozen-pack preservation and storage. The potato breeding work continues to show promise and about fifty selections have been made from thousands of two year old seedlings for trial on a larger scale. Information has continued to accumulate on the performance of a wide variety of fruits. Promising seedlings of a number of different kinds of flowers have been developed and are being multiplied for introduction.

In co-operation with the Dairy Branch, Alberta Department of Agriculture, the Dairy Department conducted a survey of "bitter flavour", the most frequent defect of Alberta winter churning cream. The condition was found to be a form of rancidity and avenues of approach to its study and possible solution were opened up. This study will be continued during 1944-45.

Inasmuch as the Department of Entomology operated on an eight months' basis during 1943-44, there was little opportunity for research. A preliminary investigation into the incidence of insect pests of the home and of stored products was started. A serious situation was found to exist. With the assistance of the Departments of Chemistry and Physiology an experiment on the control of aquatic insects was initiated.

The Department of Field Crops received research grants during the year from the National Research Council, United Grain Growers, Canada Malting, the Alberta Wheat Pool, and Naugatuck Chemicals. These grants assisted the research work of the Department very materially. Cereal breeding was continued on wheat, barley and flax. The first tests on early, soft, white wheats were carried out, and indicate that favorable progress is being made. Barley selections have yielded some promising material. The new barley variety, licensed under the name "Titan", was accepted for registration during the year and a number of selected growers are multiplying the 1943 crop of about 90 bushels of seed. It is expected that from 1,000 to 1,500 bushels of first generation seed will be available for distribution in 1945. Studies with forage crops indicate that old stands of alfalfa usually set less seed than do one year old crops. The earliest soybeans again proved to be unsuited to Edmonton conditions. Seed treatment studies on cereals and flax were continued on an extensive scale and investigations on the treatment of seeds with micro-organisms and their by-products were initiated. The facilities of the Biochemistry Division of the Department were largely devoted to war research during the year.



Assistance was rendered in a national project involving a study of the use of wheat for the production of butylene glycol, which can be used in a synthetic rubber programme. Work on the part played by sulphur in determining quality of wheat was continued as time permitted.

The Department of Field Crops sponsored a Visitors' Day on August 1st. Over 200 persons attended, and those present displayed keen interest in the work being done.

The Department of Animal Science continued a programme of experimental work during the year with beef and dairy cattle, sheep, and swine. A grant was received from the Consolidated Mining and Smelting Company for the purpose of initiating a research project on the use of urea as a source of protein for dairy cattle and sheep. Swine feeding investigations were concerned with obtaining further information on the use of larger amounts of proteins of plant origin in the development of mixed protein supplements for swine feeding. The results of these experiments are being applied by swine producers and feed manufacturers in meeting the requirements laid down by the Feeds Administrator of the Agricultural Supplies Board. A three year project comparing linseed oil meal and flax meal as supplements for fattening cattle has been completed. The "cover crop" experiments initiated in 1942 were duplicated during 1943. The results indicate that this type of pasture may be utilized effectively in reducing the cost of producing beef. Cobalt feeding trials with sheep are being continued. Research related to poultry production was aimed at ascertaining the value of synthetic riboflavin in poultry feeds and the place of certain amino acids and vitamins as additions to "starting rations" containing soy bean oil meal as the sole protein supplement. It is to be noted that the majority of feed manufacturers in Canada are applying the results secured from the riboflavin feeding trials. Livestock breeding work directed at the improvement of Alberta livestock is proceeding continuously. In this connection it may be mentioned that at the 1944 Calgary Spring Show three Shorthorn bulls from the University Farm won championship and reserve, and first in group of three bulls. The champion sold for \$1,600, the highest priced Shorthorn of the show.

The twenty-second Annual Feeders' Day was held in June, 1943, and several hundred farmers from widely scattered areas in the province listened to a review of the livestock experiments conducted during the year.

Publications issued during the year for farmers' use were as follows:

*Bulletin:*

No. 40.—Soil Survey of Rosebud and Banff Sheets.

No. 41.—Feeding and Management of Dairy Cattle.

*Joint Series:*

No. 3.—Feeding and Management of Swine.

## Report of Dean R. S. L. Wilson of the Faculty of Applied Science

The number of undergraduates in this faculty is 369, compared with 367 last year. The distribution among years and departments is:

First year .....	151
Composed of:	
No. 2 C.A.U.C. (Army) .....	60
Civilian .....	90
Partial .....	1
Second year .....	113
Chemical Engineering .....	35
Civil Engineering .....	20
Electrical Engineering .....	47
Women .....	1
Mining Engineering .....	10
Third year .....	56
Chemical Engineering .....	13
Civil Engineering .....	14
Electrical Engineering .....	20
Engineering Physics .....	3
Mining Engineering .....	6
Fourth year .....	49
Chemical Engineering .....	20
Civil Engineering .....	10
Electrical Engineering .....	12
Mining Engineering .....	7
Total .....	369

The Army students in first year will not continue next session nor will there be another similar class.

In addition to undergraduates the special courses for Naval ratings were responsible for bringing 415 students for periods of from 3 to 4 months (see Table VIII).

**Table VIII.—R.C.N. Courses at the University of Alberta**

Fourth and Fifth Electrical Artificers Course, R.C.N.—May 24, 1943-September 17, 1943 .....	132 men
Third Radio Artificers Course, R.C.N.—July 26, 1943-November 15, 1943 .....	54 men
Sixth Electrical Artificers Course, R.C.N.—September 20, 1943-January 14, 1944 .....	64 men
Fourth Radio Artificers Course, R.C.N.—November 22, 1943-March 10, 1944 .....	52 men
Seventh Electrical Artificers Course, R.C.N.—January 17, 1944-May 12, 1944 .....	63 men
Fifth Radio Artificers Course, R.C.N.—April 10, 1944-July 28, 1944.....	50 men
Total for 1943-44 .....	415 men

A further addition brought 32 men for a short series of lectures and demonstrations on Prospecting. This series was given by the departments of geology and mining engineering in co-operation with the Alberta and North West Chamber of Mines and Resources and one or more mining companies.

The usual standards of academic achievement have been maintained by students in spite of extra demands on their time and attention caused by military training and the imposition of man-power regulations which change from time to time.

About a third of this year's graduates have been accepted by the Navy and Army for training for commissions.

A serious loss to the staff came in November through the death of Associate Professor Cornish, acting head of the Department of Electrical Engineering. The Navy kindly loaned the services of Sub-Lieutenant M. R. Hannah, a recent graduate of the Department, for the remainder of the session and Associate Professor Porteous became acting head.

An appointment was made in the Department of Civil Engineering to teach the subjects of hydraulics and mechanical engineering. Also, a demonstrator was added to this Department. Some graduate and student assistants were used to serve the special needs of No. 2 C.A.U.C. and the usual requirements in drawing courses.

Many members of the staff are called on from time to time to give professional service to research and other problems arising from war needs and important construction projects. Much of the vacation period is devoted to such work. There is a steadily increasing need of staff opportunities for research work in the engineering departments.

Convocation Hall continues to be used for courses requiring the use of drafting tables. More than once each week, on the average, the tables have to be rearranged and seats brought in to enable the use of the hall for other than teaching purposes. The fixed lighting is not suitable for drafting and a special set of lamps hung from the high ceiling, while providing some improvement, is not good enough to avoid eyestrain on many of those who use the tables. The frequent shifting of tables damages them and their contents. It is planned to improve the tables and lighting to some extent before next session. The hall itself was never designed and is not suitable for drafting work.

Second year classes will be smaller next session. Third year classes will likely be larger than ever before in Chemical, Civil, and Electrical. One effect of the latter will be a decidedly heavier pressure on accommodation in the three departments. Resort may have to be made to evening classes in certain subjects. Unpredictability of certain aspects of Canada's manpower problem makes it unwise at this time to attempt definite plans for this contingency. Provision has been made for certain equipment, but some problems of space have still to be solved. Storage space is needed in both Chemical and Civil Engineering Departments.

A few minor changes have been made in the curriculum.

The staff have given their time and effort without stint through another difficult wartime session.

## Report of Dean M. E. LaZerte of the Faculty of Education

I have the honour to submit the following report of the Faculty of Education for the session 1943-44:

### 1.—*Enrolment.*

The enrolment in various classes was as follows:

(a) Summer Session, July-August, 1943 .....	186
(b) Accelerated session, ending August, 1944 .....	15
(c) In attendance, winter session, 1943-44:	
B.Ed. ....	57
B.A., B.Ed. ....	3
B.Ss., B.Ed. ....	3
	— 63
(d) Registered for partial programs .....	41
	— 305

Groups (a), (b), (c) and (d) are not mutually exclusive, as many students are members of more than one group.

### 2.—*Number of Students Receiving Diplomas or Degrees.*

The number of students receiving diplomas or degrees during the year:

	Summer Session, 1943	Spring, 1944	Total
Junior Diploma .....	11	9	20
Senior Diploma .....	27	19	46
B.Ed. ....	24	18	42
M.A. (in Ed.) .....	1	1	2
M.Ed. ....	.....	3	3
		—	113

### 3.—*New Developments.*

At the request of the Minister of Education the Faculty of Education has assumed responsibility for the in-service training of teachers during summer session. The Faculty of Education is now registering for the 1944 Summer Session. Several hundred students will now attend the University Summer Session instead of the Summer School formerly conducted by the Department of Education.

Of added interest is the fact that the Department of Education has appointed a Committee to consider the integration of all teacher-training in the province under the Faculty of Education. If present plans materialize, all entrants to the profession will receive their post-secondary-school education and training in the University. At various stages of the B.Ed. program teachers-in-training will be given elementary and junior certificates. For all teachers of primary, intermediate, senior and high school grades the B.Ed. degree will mark the first major terminal point in their training.

### 4.—*Staff.*

The Faculty of Education welcomes back to its staff Lt.-Cmdr. H. E. Smith, who at the request of the University is receiving his discharge from His Majesty's Forces.

### 5.—*Desirable Developments.*

To supplement the present training of teachers the Faculty of Education should establish an educational clinic. Dr. H. E. Smith's training and experience has been very thorough in the fields of guidance, mental hygiene and educational diagnosis. The major responsibility in these new activities would very naturally be his.

During the period of demobilization and rehabilitation many teachers will doubtless take advantage of the provisions of Order P.C. 7633 to continue or advance their training. The resulting increase in intra-mural registrations of graduate students will doubtless make it necessary for the Faculty of Education to give both winter-session and summer-session lecture courses in M.Ed. programs which heretofore have been mainly extra-mural.

To keep abreast of educational trends an increased emphasis must be placed on educational research. The Faculty of Education will doubtless be able to make its contribution to this development through supervision of the increased amount of graduate study that is likely to come under its direction.

### **Report of Dean M. M. MacIntyre of the Faculty of Law**

During the academic year just closing there were 17 men students in the Faculty of Law and no women. Ten of this number are in the graduating year and nine are being recommended for the degree of Bachelor of Laws. There were five students in first year and two in second year.

This year three new alternating courses were taught for the first time. These courses are Administrative Law, Bankruptcy, and Informal Discussion of Recent Cases and Statutes. The course last named is designed to encourage students to keep abreast of the rapidly changing legal order, and to interrelate and synthesize the knowledge acquired from the wide variety of specialized subject matters. This course is in its preliminary experimental stage, but it already offers attractive possibilities. For instance, since it surveys the whole field of law it could be made the basis for a refresher course for graduates returning from the armed services. To the best of my knowledge no other law school offers a similar course.

The staff and students enjoyed a year of interesting study, although teaching such small groups as we now have in the first and second years calls for additional effort from the instructor, because there are too few students to supply either the natural stimulus to discussion, or a wide enough variety of responses to lead to normal explanation of the problems involved in any case under consideration.

The Alberta Law Quarterly continued its tenth year of publication. Unfortunately we were able to complete only two of the issues during the academic year, leaving the remaining issues to be published during the summer vacation.

Last year I had the pleasure of reporting that a member of our graduating class (Francis Eugene La Brie) had been awarded the Newton Wesley Rowell Memorial Fellowship by the Faculty of Law at the University of Toronto. This year I am happy to report that Mr. La Brie has received a further award from the University of Toronto which will entitle him to another year of post graduate study, and that a member of this year's graduating class (Carleton W. Leviston) has been awarded the Newton Wesley Rowell Memorial Fellowship for next year. Another member of last year's graduating class (John B. O'Connor) proceeded from here to the University of Toronto, and I have received several reports from the Faculty of Law



at that University complimenting us on the showing our graduates are making in graduate work. Two other members of this year's graduating class plan to pursue post-graduate study next year. These men are Jesse Gouge, who will enter Harvard Law School as a special student, if the Foreign Exchange Control Board will sell him American funds, and Melville Howey, who will accompany Mr. Leviston to Toronto if his medical examination discloses that he is of low medical category.

Several graduates now in the armed forces have written me expressing a desire to return to this University for a refresher course. I am, however, unable to estimate how many of them would feel that way when the war is actually over. We could, however, offer them a full year's work made up of the new courses introduced since their graduation. The Faculty has this general problem under consideration and plans will be made as circumstances develop. It is easy for us to keep in touch with our graduates through personal contact and through the Quarterly.

Our relations with the Education Committee of the Benchers of the Law Society of the Province of Alberta continue to be extremely cordial. As a matter of fact, most of the Edmonton members of the Committee are on our part-time teaching staff, and I am very happy to say that the attitude of this Committee toward legal education is extremely enlightened and progressive.

There is, at present, a serious shortage of legally trained minds to conduct the ordinary business of the community. Within the last month I have regretfully advised many law offices, businesses and government agencies that there are no students or young lawyers available to fill their needs. Some of the requests which we are unable to fill offer excellent financial inducements, but such young men as are physically unfit for military service find post-graduate study or private practice too attractive for them to be influenced by immediate financial considerations.

### **Report of Dean A. C. Rankin of the Faculty of Medicine**

I have the honour of submitting the annual report of the Faculty of Medicine, including the affiliated Schools of Nursing, Pharmacy, and Dentistry, covering the session 1943-44.

*Nursing*—Miss H. G. McArthur, Acting Director.

The enrolment of the School of Nursing for 1943-44 regular session increased by 7 students over the previous year with 153 students—75 in the degree course and 78 in the diploma course. In addition, 4 students were accepted for the Advanced Course in Practical Obstetrics and received their certificates in January. It is intended to open this course to more nurses in the fall, 1944, now that the course is established on a sound basis. This course, as a pioneer enterprise, has aroused interest across Canada.

The first summer school for graduate nurses was successfully completed with 45 nurses registered, 26 taking the first half of the Public Health Nursing program and 19 registered in the alternative Ward Teaching and Supervision. The second half of this course will be offered in the summer of 1944 to complete, with the addition of field work, the final year B.Sc. in Nursing course.

With the continued financial assistance of the Alberta Association of Registered Nurses, a ten-week course for administrators of small hospitals was offered in January. Eleven senior graduate nurses attended and reports indicate that this course met an urgent need in rural hospitals in Alberta.



These special courses increased the number of students enrolled in the School of Nursing by 67 in one year. The major difficulty encountered in this expansion was the lack of office space.

The resignation of Miss H. G. McArthur, Acting Director, was accepted, effective June 30th, 1944, and Miss M. McCulla was appointed to succeed her. Miss McCulla came on the staff February 15th, 1944. The appointment of a science instructor to the School of Nursing staff in 1944 will increase the difficulty of the lack of space.

*Pharmacy*—Dr. A. W. Matthews, Director.

A total of 18 students enrolled in the School of Pharmacy during the session. The distribution was 6 in each of the three years, as follows: First year, 3 women and 3 men; second year, 4 women and 2 men; final year, 1 woman and 5 men. Two male apprentices who qualified for entrance to the University last September were refused deferment and are now in service. The incompatibility of the present apprenticeship arrangement with the Selective Service regulations is further demonstrated by the fact that only 8 persons, 7 of them women, wrote the beginning apprenticeship examinations in September, 1943. This matter is again being brought before the Council of the Pharmaceutical Association by the Director of the School.

Certain major curriculum changes became effective for the first year of the course in the 1943-44 session. These will be followed by certain revisions in the later years as this class progresses. In addition to the regular classes in Pharmacy, lectures in *Materia Medica* were again given in the University Hospital to two classes of nurses, and a short series of discussions on selected topics was presented in the early part of the Therapeutics 51 course. In the absence of Mr. M. J. Huston, on leave for graduate study, Miss Rose Wannop, B.Sc., assisted with the work of the session.

With the assistance of the Frank Wyeth Horner Memorial Book Gift Fund a number of important additions have been made to the library of the School. The co-operation of the Ontario College of Pharmacy in supplying this School with a number of rare periodicals at a very nominal charge is gratefully acknowledged. Acknowledgement is also made of the gift of a prize in Pharmacy by the McDermid Drug Company, Limited, of Calgary. This prize is to be awarded annually in memory of the founder of the firm, Mr. N. I. McDermid, pioneer Alberta pharmacist, and marks the first donation of like character by one of the graduates of the School.

At the request of the Dean of Medicine plans have been submitted in connection with the space estimated to be required by the Department of Pharmacy in post-war years. The projected refitting of A405 as a dispensing laboratory could not be proceeded with during the past year because of short-staff in the Works Department. It is hoped that a start on these fixtures will soon be made. The units will be portable and will expand laboratory facilities to serve temporarily in the event that new quarters are not available to receive the first post-war class.

*Dentistry*—Dr. W. Scott Hamilton, Director.

The School of Dentistry operated on the accelerated basis during the 1943-44 session and thirteen dental officers were made available to the Canadian Dental Corps. Fifty-three students, including one woman student, were in attendance.

The Kellogg Foundation grant was renewed, and was of great help to the students.

The School is still handicapped by the pressing need for equipment and better quarters. In the proposed expansion of the School, due consideration is given not only to undergraduate training, but also to post-graduate training and to the very important subject of Preventive Dentistry.

The Director of the School attended the meeting of the American Association of Dental Schools this year, and found this to be a very important contact.

Two members of the dental staff gave clinics and lectures in Saskatoon, Regina, Winnipeg and Calgary.

The Director wishes to record his gratitude to the Dental Students' Undergraduate Society for their co-operation and their helpful suggestions.

### *Medicine.*

Under acceleration as desired by the Department of National Defence, two classes of students have graduated in Medicine during the period under consideration; the first, on September 4th, 1943, and the second on May 16th, 1944. The process of acceleration is responsible for conditions which have made instruction unsatisfactory from the point of view of both the students and the staff, and the procedure has been generally criticized by medical educational authorities. It has been tried in both Great Britain and the Soviet Union and abandoned.

It is therefore with considerable satisfaction that I am able to say that during the next accelerated session, from June 1st to December 31st, only the third and fourth years of the new course and the sixth year of the old course will be required to be dealt with. The second and incoming years will attend during the normal session and will continue so in the future. This change is the result of representation made to the Department of National Defence by the Canadian Association of Medical Colleges.

The first class of the new five year course consisting of four academic years followed by an undergraduate internship, a procedure fully endorsed by the Association of Canadian Medical Colleges, will be the fourth year in the accelerated course.

In all, since acceleration was first applied in July, 1941, to the then sixth year, there have been 152 graduates, and during the calendar year 1945, of three groups of graduates totalling 89, 79 will be available to the armed forces. Since 1925, there have been 509 graduates in Medicine, amongst whom a fair proportion have reached prominence.

During the year Dr. E. H. Watts, Lecturer in Anaesthesia, was granted leave of absence and was appointed in the Royal Canadian Navy. Assistant Clinical Professor R. G. Huckell proceeded on leave of absence to act for a period of six months as chief surgeon in the Canadian Red Cross Orthopaedic Unit at Hairmyre, Scotland. Associate Professor H. C. Jamieson, who is also Professor of the History of Medicine, was promoted to the rank of Professor of Clinical Medicine as was also Associate Professor J. W. Scott. Drs. N. E. Alexander and R. L. Anderson were promoted from lecturer to assistant professor of Clinical Surgery. Dr. D. G. McQueen was appointed an instructor in Clinical Surgery and Dr. L. P. Mousseau

was given a similar appointment. Professors J. W. Scott and R. M. Shaw, financed by the Markel Foundation, proceeded in August to Honduras and Guatemala respectively for experience in tropical medicine in connection with the war effort and in order that undergraduates in training in the accelerated courses for appointment to the armed services might receive the necessary instructions in tropical diseases. They returned in September. Drs. N. L. Terwilleger and J. L. McPherson resigned during the year after long and valuable service.

The Department of Biochemistry undertook last fall the separation of serum for the National Red Cross Blood Donor Services and is at present processing about one thousand bloods per week received from donor clinics in Calgary, Lethbridge, Medicine Hat, Banff and Edmonton; and from a mobile unit collecting blood from the Calgary area. This is an important contribution to the war effort.

The annual refresher course, financed by the College of Physicians and Surgeons of Alberta, was held from May 8th to May 12th inclusive. Through the co-operation of the Medical Director General (Navy), the Director General of Medical Services (Army), and Director of Medical Services (Air), a splendid programme was arranged with speakers of prominence from the services including two consultants in medicine from the army. In addition the Committee on War-Time Graduate Medical Meetings (U.S.A.) sent Dr. Alexander E. Brown of Rochester, Minnesota, and Dr. Robert R. Linton of Harvard University. It is interesting to note that Dr. E. A. Walker, Professor of Neuro-Surgery, University of Chicago, who presented three papers, is a graduate of the University of Alberta. The course was largely attended by medical officers from all branches, detailed officially, and by many civilian practitioners.

For the major portion of the time under consideration, the administration of the Faculty was under the direction of Dr. J. J. Ower as Acting Dean.

### Report of Dr. R. K. Gordon, Acting Chairman of the School of Graduate Studies

1. During the academic year, 1943-44, 63 students have been registered in the School of Graduate Studies in candidature for higher degrees.

The distribution of graduate students, according to degrees sought, has been as follows:

	Men	Women	Total
Master of Arts .....	13	2	15
Master of Science .....	11	1	12
Master of Science (Agriculture) .....	13	.....	13
Master of Science (Applied Science) .....	4	.....	4
Master of Arts (Education) .....	1	.....	1
Master of Education .....	17	1	18
	—	—	—
	59	4	63

In addition, 11 graduates who are not candidates for any higher degree have been registered in the School as Special Graduate Students.

The distribution of candidates for higher degrees according to Departments has been as follows:

Animal Science .....	1	History .....	8
Applied Science .....	4	Horticulture .....	1
Chemistry .....	12	Philosophy and Psychology .....	3
Education .....	19	Political Economy .....	3
English .....	1	Soils .....	3
Entomology .....	1		—
Field Crops .....	7		63

2. Virtually all the candidates for the degree of Master of Arts and for higher degrees in Education have been extramural students engaged in teaching or in other employment. Candidates for the degree of Master of Science have been in attendance during the regular academic session. Many have been engaged on projects of war research. The presence of others, not so engaged, has been with the approval of the Mobilization Board. In 1944-45, admission to the Graduate School for post-graduate work in Science will require the consent of the Wartime Bureau of Technical Personnel.

3. The School of Graduate Studies recommends that the Robert Tegler Scholarship be awarded to William E. Brown of the Graduate School (Field Crops), and that the two University of Alberta Research Scholarships be awarded equally among James Harry A. Donald and Donald Quon (graduating students in Chemical Engineering), Norman Robert Stanley Hollies (graduating student in Honors Chemistry) and Leslie Robert Wetter (graduating student in Field Crops).

### **Report of the Librarian, Mr. D. E. Cameron**

The Library has completed another year under conditions of increasing congestion. The accelerated medical courses have increased the attendance required in the Medical Library, and under present staff conditions this has involved a greatly increased use of student help, which, while necessary and useful, somewhat complicates the arrangements of the staff.

The wartime condition of the book trade, which in some cases has suspended part of its earlier service, has led to unusual delay in delivery of orders, and paper restrictions have led to small editions which are often quickly exhausted, and to deferred reprinting of new editions. The difficulty of getting reports on unfilled orders has been marked, but on the whole the Library has not met with difficulties of too serious an order, all things considered.

Very full use has been made of the reading rooms, and as usual the Main Reading Room was kept open for fourteen hours daily from Monday to Friday for the five weeks preceding the final examinations. Experience as to student needs seems to indicate the usefulness of small rooms available for private reading and study distributed throughout the buildings, without attendance, in which students could study or write up their notes. A large proportion of the time spent in the reading rooms is devoted to that purpose, and provision elsewhere would greatly lessen the pressure on space for considerable parts of the term.

Use has been made of the resources of the Library by professional men and others on war service in Edmonton, and appreciation has been expressed of the service given. The Medical Library continues to send out books on request to the

practitioners of the Province, the number of parcels sent out last year (1943) being 174—a decline from 1942, which, however, has already been made up by a marked rise in the calls for books in the past few months. Members of the staffs of both Canadian and United States forces have been in touch with the Medical Library, and have made use of its aid.

The Colonel J. H. Woods Collection is found to be in steady use, and is being added to carefully, with the end of the original grant coming in sight. Many members of the staff are interested in this collection, and useful suggestions have been received from many quarters as to desirable additions.

The Philosophical Society made a grant of eighty dollars from its funds, and to this the Friends of the University added their promise of aid, enabling the Library to place an order for an offset print of the very rare set of Saccardo, the *Sylloge Fungorum*, at a cost of \$200, the original, when obtainable running to \$1,800 or more. The Society has again made a grant, which will presently be available for Library use.

Of the Frank Wyeth Horner Memorial Fund for the purchase of books for the Department of Pharmacy, the main part has now been expended under Professor Matthews' direction, leaving a small portion for further purchases.

The binding programme has been maintained, and a great deal has been done to build up periodical files, partly by purchase, but largely through exchange of duplicate volumes and parts. In one shipment our Library has sent out over sixty packets, ranging from four to forty pounds in weight, and has received corresponding returns from other libraries.

The courtesy of other libraries, from which required material has been obtained throughout the year, has been used and appreciated, and the Library has reciprocated as fully as possible.

Arrangements are being made to collect duplicate runs of journals on this continent to help in replacing sets lost by European libraries through war damage. Our Library is now holding material for this purpose, but owing to lack of space is not in a position to make an extensive collection now. Later, members of the staff will be asked to aid in this project.

The number of accessioned books is now 76,667.

There has been no change in the permanent library staff during the year.

The College of Physicians and Surgeons again gave a donation of \$200 for the purchase of books for the medical library, and among other gifts, which were all duly acknowledged, were:

A bound volume of the "Temperature and other meteorological records" of the late Professor H. R. Webb, presented by the Science Association of the University; collection of medical books from Dr. Grant Bain of Chehalis; World Calendar, from Miss Achelis, N.Y.; Swedish Yearbook, from the Swedish Consulate; pamphlets from Fr. O. Fuchs, Franciscan College; Engineering papers, from Loveth Service Station; Yearbooks, from Dr. W. G. Anderson, Wardlaw; The Arthur Papers, from Toronto Public Library; 20 volumes from Mr. John C. McDougall; publications from New York State Library, the Carnegie Institution, the Institute of Pacific Relations, the Universities of Chicago, Illinois, and Minnesota; further books from Mr. W. J. Bown; Annual volume from the Engineering Institute,



Edmonton Branch; publications of the University of Michigan; A Pioneering Odyssey, from Mr. H. W. Wriston; 19 volumes from the Canadian Pharmaceutical Association; 3 interesting volumes from Mr. George Salt, Dean of King's College, Cambridge; publications of the University of Missouri; volumes of the Canada-United States Relations series, from the Carnegie Endowment for International Peace; collection of law books from the estate of the late Andrew Smith; collection of law books from Mr. John W. Hugill, K.C.; collection of books from Mrs. Fairbrother; six volumes from the Canadian Medical Association; collection of books from Mr. E. J. Nicholson, Glenford; run of Herd Books from the Provincial Dept. of Agriculture; 3 volumes from Miss J. E. MacLean; and volumes from School of Commercial Studies, Montreal; King's Printer, Alberta and Saskatchewan; Dr. Tracy of Toronto; Dr. J. J. Heagerty, Ottawa; the Royal Bank of Canada; Czechoslovak National Council; Mr. Galbraith, Edmonton; MacLean Publishing Company; Mrs. Worden, Grimshaw; Swedish-Amer. News Exchange; Mr. W. N. Sharpe; Dr. A. W. Downs; Dr. J. J. Ower; Dr. R. K. Gordon; Mrs. L. C. Conn; Dr. Heber Jamieson; Mr. R. W. Ross, Edmonton; Dean G. M. Smith; Professor Gard; Judge W. R. Howson; Mrs. Goodridge Roberts.

From St. Joseph's College the Library received an interesting collection of its books, which are greatly appreciated; among them being books on archaeology, ecclesiastical history, and the important and scarce Survey of London, by Sir Walter Besant.

The Library again express its appreciation of the friendly co-operation of the academic staff, and of the faithful service of the Library staff under conditions that have at times been difficult and trying.

### **Report of the Provost. Dr. J. M. MacEachran**

On behalf of the Committee on Physical Education, the Committee on Students' Athletics, the Committee on Medical Services, and the Memorial Organ Committee, I beg to report as follows:

#### *1.—Committee on Physical Education.*

The Committee on Physical Education is strongly of the opinion that, as a result of the experience in recruiting in connection with the Armed Services, and in view of probable comprehensive post-war schemes of Public Health and Public Welfare, the problem of physical education is due to assume much greater importance in the whole scheme of Education than it has enjoyed in the past. In this field, as in every other field of educational effort, the University should be prepared to provide the necessary leadership. The Committee, accordingly, recommends that, as soon as the end of the war appears to be in sight, steps be taken to secure a thoroughly competent Director of Physical Education who will organize that Department on the same permanent and efficient basis as that of all other Departments of the University.

The Committee recommends further that the University should at the same time take the necessary steps to provide adequate gymnasium accommodation and facilities. It is hoped that the R.C.A.F. Drill Hall may be secured for that purpose.

#### *2.—Committee on Students' Athletics.*

The Committee on Students' Athletics, for the same reasons as stated above, strongly recommends the appointment of a highly qualified Director of Athletics.



Such a man ought to be able to give efficient coaching, of the instructional sort, in at least two major athletic activities such as rugby and basketball. It might be possible to combine the Department of Physical Education and the Department of Students' Athletics under one Director. The difficulty with such a combination, however, is that Athletics and Physical Education must to a large extent be carried on during the same hours—4:00 to 6:00 p.m.

The Committee would like to see the Skating Rink restored as soon as possible to the students, and look forward to the day—in the near future, it is hoped—when a swimming pool will be provided on the campus to meet the demand for the rapidly increasing interest in swimming.

The Committee is strongly of the opinion that the University should assume full responsibility for keeping the Athletic grounds and track in proper shape.

I should like to express personally my appreciation of the stand of Mr. Amerongen, past President of the Students' Union, in his report in regard to the deleterious effects of the "points" and "awards" systems upon Students' Athletics and students' activities generally.

### 3.—*The Committee on Medical Services.*

The Committee on Medical Services is glad to report that it will be able to end the session with a small balance to its credit on the financial side. It is also glad to report that there was no epidemic during the session. At the final meeting a resolution was passed expressing the thanks of the Committee to the Provincial Department of Health for providing a Tubercular test of all the students, free of charge to the Committee and to the students. The thanks of the Committee was also expressed to the Registrar and his staff for making such satisfactory arrangements for parading the students for this test.

Special appreciation was expressed by the Committee for the continued excellent services of the resident nurse, Miss Revell.

### 4.—*Organ Committee.*

The Organ Committee recommends that, on account of the warm response to the Memorial Service of last November, and on account of the possibility of a large number of casualties in the coming invasion of Europe, more consideration should be given to the arrangements for next Remembrance Day. It is suggested that, as Remembrance Day this year falls on Saturday, Convocation Hall should be cleared and seated to accommodate an increased attendance of students as well as of relatives and friends of students who have become casualties in the present war. It is recommended that lectures should close at 10:30 a.m. and begin again at 11:15 a.m.

The Organ Committee is very glad, in response to the President's request, to co-operate in every way possible with the Department of Extension in the arrangement of a Radio musical programme, and has already had a satisfactory consultation with the Director of the Extension Department and the Program Director and Chief Announcer in regard to future programmes.

## **Report of the Officer Commanding, Canadian Officers Training Corps, Lieutenant Colonel P. S. Warren**

1. The number of students enrolled for Headquarters training in the University of Alberta Contingent, C.O.T.C., for the session 1943-44 was 267. This is the smallest enrolment the unit has had since the war started, due in part to the advent of the University Air Training Corps and the University Naval Training Division, in part to a large percent of men of low medical category (73) who cannot be trained, and in part to the ruling that two years' satisfactory basic training is all that will be required for students in this University. Students who have completed their training but been kept on strength of the unit number 165.

2. The ruling regarding two years' satisfactory training has, on the whole, worked out well. There is much better morale in the unit as the cadets feel there is something to work for. The weakness of the ruling is felt in the falling off of the number of capable instructors, as it requires more than two years' training to make an instructor. It also places the cadets who go active with commissions at the end of their University course at a disadvantage with those from other Universities who continue their training throughout their University course.

3. The large number of fully trained officers in Canada not being utilized in the Active Army Overseas has prevented many of our graduating students from enlisting in the Active Army with commissions. Only certain technical appointments have been allotted to the Universities. The number allotted to this University is 11, and spread as follows: R.C.A. candidates, 3; R.C.E. candidates, 5; R.C. Sigs. candidates, 2; O.M.E. candidates, 1 (Maths and Physics).

Two of our third year engineers are also enlisting under G.O. 139/39 for summer training only.

4. The training during the past year probably reached a higher point than before and the inspection by the District Officer Commanding was considered very satisfactory. This was due to the very fine co-operation among all the training and administrative officers in the unit. The principal officers and N.C.O.'s of the training and administrative staff are as follows: O.C. Lt.-Col. P. S. Warren, 2 I/C. Major G. M. Smith, Major H. J. Towerton (Chief Instructor), Major F. Owen (Senior Training), Major W. G. Hardy (Junior Training), Capt. C. R. Tracy (Adjutant), Lieut. G. A. Elliott (Assistant Adjutant), Lieut. W. H. Johns (A Coy.), 2/Lt. G. J. Amerongen (B Coy.), Lieut. W. C. Broadfoot (C Coy.), 2/Lt. J. N. Willson (D Coy.), CSM. A. Croft, CQSM. J. B. Robb, Sgt. D. L. Cruickshank.

## **Report of the Officer Commanding, No. 8 University Air Training Corps, Squadron Leader R. M. Hardy**

The squadron started the 1943-44 session with a carry-over of 86 airmen from the maximum strength of the previous year of 185 airmen. In October, 1943, 55 new trainees were enlisted. The maximum strength of this past session was thus 141 airman.

Of the approximately 100 dropped from our strength between the 1942-43 session and the commencement of the 1943-44 session, 55 trainees transferred to active service in the R.C.A.F. and one in the R.A.F. The majority of these were accepted for aircrew training. Our information is that all of these who have

completed their training to date have won commissions in the R.C.A.F. Twenty students have enlisted in the Navy or Army.

During the past session two courses of training were offered, one for first-year trainees, and one for second-year trainees. The instruction and administration were handled partly by an R.C.A.F. detachment of one officer and two Flight Sergeants posted to the Unit, partly by instructors from No. 4 I.T.S., and partly by University staff people. The University instructors working with the Unit were Flight Lieutenant F. M. Salter, Flight Lieutenant H. R. Thornton, and Squadron Leader R. M. Hardy, Officer Commanding the Unit. Dr. M. M. Cantor also gave one course of lectures as a civilian instructor.

The first-year trainees were given 129 hours' training and the second-year trainees 132 hours during the academic session.

In May three parties from the unit attended the two-week summer camps at R.C.A.F. flying stations. Forty-three first-year trainees under the command of Flight Lieutenant Salter attended an R.A.F. station in Penhold. Also in attendance at this camp were U.A.T.C. personnel from Mount Royal College and from colleges in Regina. Squadron Leader Garden of Mount Royal College was Officer Commanding of the combined parties, with Flight Lieutenant Salter acting as Adjutant. A party of 29 second-year trainees under the command of Flight Lieutenant Thornton was posted to an R.C.A.F. station in Calgary. Another party of second-year trainees under the command of Squadron Leader Hardy was posted to the same station on April 30th.

Seven trainees were granted leave for farm work purposes and two for the purpose of taking summer positions requiring them to go into the North country before the spring break-up. Two trainees did not attend camp for medical reasons.

A standard satisfactory to the R.C.A.F. has been maintained in the training. In general, the trainees have been reasonably conscientious in their training. There is some evidence, however, that the U.A.T.C. training program during the University session is overloaded on the academic side when taken with a normal University course. It is proposed to discuss this situation with the R.C.A.F. authorities before another University session. It may be possible to substitute more non-academic training such as drill, P.T., and armament work, for a portion of the academic work now in the winter syllabus.

### **Report of the Officer Commanding, University of Alberta Naval Training Division, Lieutenant Commander A. W. Matthews**

The University of Alberta Naval Training Division began its first complete session of activity in September, 1943, with a total of 56 ratings. The proportion of rejections, on medical grounds, among students volunteering for this service was alarmingly high. By the end of the academic session the strength had been reduced to 54 ratings, one student having left to go into Active Service in November, 1943, and another having been called Active as a result of failure to meet the minimum standard in the mid-session examinations.

Of the 54 who finished the term, 23 were students who joined the U.N.T.D. in March, 1943, and who had taken spring training at H.M.C.S. York. These were formed into one division for instructional purposes, while the second division consisted of New Entries. Instruction was given in field training, seamanship,

signals, organization of the Navy, strategy and operations, etc. Officers and instructors were furnished by H.M.C.S. Nonsuch and the Commanding Officer U.N.T.D. also assisted with some of the lectures. The main burden of lecturing was carried, however, by the Divisional Officer, Sub-Lieut. Lorrinan.

The U.N.T.D. co-operated with the C.O.T.C. in arrangements for the sittings of the Armed Services Wartime Bureau of Technical Personnel Selection Board in January. As a result of selections made at that time, seven graduating students in Electrical Engineering, three of them U.N.T.D. Stokers, 2nd class, will go on Active Service at the end of the session as Probationary Sub-Lieutenants (E) of (Elect.). Eight other U.N.T.D. ratings, including two members of the graduating class, will be entering on Active Service as Officer Candidates at the end of the session. The remainder of the Division, totalling 36, proceeded to H.M.C.S. Naden on April 29th, for two weeks of spring training, including some sea time.

During the early weeks of the session, the New Entries were taken to Lake Wabamun Camp for one week-end. This outing was on a voluntary basis and instruction in boat-pulling and other aspects of seamanship was given under the direction of the Divisional Officer. The Commanding Officer visited the camp for Sunday Divisions. The U.N.T.D. also joined with the Ship's Company of H.M.C.S. Nonsuch in the Fifth Victory Loan Parade and in one Church Parade. Toward the end of the session the unit, together with the other service units, participated in the march-past arranged for the National Film Board.

On many occasions during the session U.N.T.D. ratings were taken on board H.M.C.S. Nonsuch for lectures and practical training. In arranging for this and providing transportation to and from the Ship, Lieutenant Commander Dawson, the Commanding Officer, and his staff co-operated to the limit of their facilities. This is considered to be an important part of the training programme, and will be continued and extended in 1944-45.

### **Report of the Director of Women's War Services, Professor Mabel Patrick**

The organization of Women's War Services for 1943-44 followed much the same plan as in previous years.

Sports were included as part of the physical fitness program for senior students. Students were allowed credit up to 20 hours for participation. The members of the Executive of the Women's Athletic Association expressed the opinion that this had been a real help in their athletic program, and had resulted in increased interest and enthusiasm. They asked that for next year the credit might be increased to 25 hours and that the same privilege be extended to women students in the first year. This recommendation was approved by the War Services Training Board.

In the past instructors for military drill were provided by Lieutenant-Colonel Warren from the strength of the C.O.T.C. This year the instruction was under the direction of Major Owen, but carried out by the women students themselves. The way in which this was carried out was most commendable.

I should like to express sincere appreciation for the assistance and co-operation given by Lieutenant-Colonel Warren and his staff, and to other members of the University staff who helped in carrying out our program.

## **Report of the Director of the Summer Session, Dr. John Macdonald**

I have the honor to report on the University Summer Session, July 5th-August 14th, 1943.

### *Number and Distribution of Students.*

The total registration was 321, of which 3 were auditors. This represents an increase of 35 on last year's registration. During the two months, following the issue of the Announcement, the indications were that the registration might be rather light, but the decision of the Government later in the spring to postpone the opening of the schools until October 10th was no doubt a factor in raising the attendance of the University session. The distribution of students by Faculties and Schools was as follows: B.A., 61; B.Sc., 38; B.Ed., 158; B.H.Ec., 1; B.Sc. Agric., 1; B.Sc., M.D., 3; B.Sc. Engin., 1; B.A., LL.B., 1; B.A., B.Ed., 3; Dip. in Ed., 29; M.A., 1; M.Ed., 8; Special, 13; Auditors, 3.

A noticeable feature of the registration is the large proportion of students in the B.Ed. course, as compared with that in the B.A. and B.Sc. courses. The interest in acceleration and other wartime circumstances are factors in this situation. It is therefore not possible at this stage to make any definite statement as to how the distribution will be stabilized with the return of normal conditions.

### *Accommodation.*

(a) Residence.—Those responsible for the two Summer Schools had some apprehensions on this score, and took certain steps to prevent an embarrassing situation from arising at the opening of the session. In view of the intensive character of the Summer School course, it is especially desirable that accommodation should be within reasonable distance of the class-rooms and should provide reasonable facilities for study. The main difficulty proved to be that very few householders were willing to commit themselves in advance to providing accommodation during the Summer Session. A short time, however, before the commencement of the session, a substantial list of addresses was obtained, with the result that students who had not found quarters were placed without delay. The fact that the registration in the Departmental School had decreased by nearly 300 (owing, in large measure, to the discontinuance of the Shop courses in Edmonton) helped to solve the problem. In this connection, it is gratifying to note that the new cafeteria on the campus will prove a very great convenience to Summer Session students.

(b) Class-room—No difficulty arises this summer owing to the fact that the Departmental School, with its substantially reduced registration, was largely concentrated in the Garneau Normal School building.

### *Guest Lecturers.*

The only guest-lecturer was Miss Esther Prevvy, from Kansas City, Missouri, who conducted an advanced course in Child Psychology. The course was well attended and greatly appreciated. In the Faculty of Education, moreover, trial was made of the plan of securing the services of local teachers to give a number of lectures in the teaching of special school subjects. The services of five such instructors were secured, and Dean LaZerte informs me that he considers the experiment well worthy of repetition.



### *Medical Services.*

With the reduced enrolment in the Departmental School (a situation which Dr. Newland considers likely to recur), it is clear that the revenue of the Medical Services cannot meet necessary expenditures and an increase in the Medical Services fee is unavoidable. The deficit this year was \$158.95, which will be met by drawing on a small surplus accumulated from previous years. It was also decided by the Medical Services Board that the mimeographed memorandum on Medical Services, which has in the past been given to each student on registration, is needlessly elaborate and detailed, with the result that it is not read carefully, and often not read at all, by the students. It was decided to try to re-draft it in a shortened and simplified form which could be incorporated in the regular Announcements of the two Schools. The more detailed document would be reserved for the use of the Medical Director and Nurse-in-Charge.

### *Extra-Curricular Activities.*

(a) Public Lectures and Musical Events.—This summer, the Departmental School was curtailed to four weeks and the pressure of the regular work on the students of that school was heavy. In these circumstances, those responsible for the Departmental School felt that functions which made a demand on the evening time of the students should be reduced to a minimum. For this reason the annual Summer School concert, organized by the Departmental School, was cancelled. The Sunday evening Organ Recital—a contribution of the University School—which would have been a welcome event, had to be cancelled because of the absence of Professor Nichols and the fact that Mrs. Clarke, whom I had hoped to secure as a substitute, was not brought to the Edmonton School this summer. The University, however, was fortunate in securing Professor Dykhuisen of the University of Vermont for a public lecture on "Philosophy and the Rural Crisis", which proved a most interesting and suggestive contribution.

(b) Sports and Athletics.—On this matter, Mr. N. J. Kennedy, Adviser to Men Students, reports: "Men's Athletics were ably organized under the leadership of Aaron Card. Difficulty was experienced in this field of student activity because of the limited number of male students and the widely scattered residence of possible participants. Games of baseball and basketball were arranged with outside organizations, as well as among teams from the student body."

(c) Dances.—Seven dances were held in Convocation Hall during the session. All these were attended by Dr. Winspear and Mr. Kennedy, who assure me they were conducted in a decorous and enjoyable manner. Last year's arrangements in regard to effective control at the door and to the bringing of guests were continued and proved successful.

(d) Picnic, Teas.—The annual picnic was held at Victoria Park. It was not very well attended, possibly for the reason alluded to above. Dr. Winspear carried on with the teas (or substitute refreshments) within the limits imposed by rationing regulations. She reports her belief that there is considerable appreciation of this convenience among the student body, and I find confirmation of this in the attitude of the Students' Executive, which finances anything that is done in this direction.

In connection with all extra-curricular activities, I have again to record my appreciation of the efficient and responsible manner in which the Students'



Executive did its work and especially of its very manifest desire to co-operate with the administration. The Advisers are undoubtedly an important factor in maintaining this very desirable liaison. So far as the general administration of the school is concerned, as you are aware, responsibility for the entire non-academic side is shared by the two Directors, and it gives me pleasure to say that I found Dr. Lord everything that could be desired as a colleague in this part of the work.

#### *General Observations.*

While I have no specific recommendations to make in the present report, there are two points to which, I think, I should draw your attention. Both arise out of recommendations made in my report last year and implemented this session.

As a result of joint action by the Faculty of Arts and Science and the Faculty of Education last winter, the Director of the Summer Session was given authority to use his discretion in dealing with students who came to summer school without, or with inadequate, advance preparation. Some students arrive from outside of the Province and plead unawareness of our regulations, others have been required, at a late date, by the Provincial Department of Education to take a course or courses to improve their teaching qualifications, and others, for one alleged reason or another fail to produce evidence of adequate preparation. The method of dealing with such candidates was, in general, to admit them to classes but to withhold the right to take the final examination at the end of the summer session unless the Director, in consultation with the instructor, was satisfied that the quality of their work during the summer seemed to justify their being given that opportunity. Otherwise, the final examination would be taken in the spring or at the commencement of the following summer session, when summer session supplementals are written. This arrangement obviates action which may appear to the student harsh or high-handed and at the same time discourages any idea that the regulation requiring advance preparation is being waived. The disadvantages of it are the fact that it means a carry-over which may adversely affect the student's preparation for the succeeding summer and the fact that it tends to create an additional complication for the Examinations Committee.

Last year, again, in the light of such information as I could gather, I recommended that an effort be made to issue the Announcement by January 1st, i.e., fully a month earlier than had been the practice. This was done. I found that about 100 students had completed advance registration by the end of January. As this constituted a third of the final registration, the change seemed to be justified. On the other hand, I investigated later the number of students who had taken advantage of the arrangement actually to make a beginning with their advance preparation. I found the number to be very small—about 15% would be my estimate. The large majority did not begin actual preparation until the middle of February, at the earliest. It should be pointed out that the earlier issuing of the Announcement gave rise to two minor awkwardnesses: the Announcement was prepared and issued rather far in advance of the Departmental School Announcement, and there are matters (e.g. date of opening and medical services information) in which co-ordination of statement is needed; and, again, the names of guest lecturers may have to be omitted from the list of instructors. I mention these points as considerations which might be kept in mind by the Director of the Summer Session.

In submitting this report, I have again to express my appreciation of the sympathetic consideration and counsel I have had from the President on all the occasions when I approached him in regard to Summer Session matters.

## Report of the Director of the Department of Extension, Mr. Donald Cameron

### *Statistical Survey.*

Number of lectures—general, drama and folklore .....	144	
Aggregate attendance .....		18,050

### *Library and Debating Service.*

Number of Regular Libraries circulated .....	95
Number of times sent out .....	121
Number of Special Libraries circulated .....	54
Number of small parcels of reference books, pamphlets, magazines and pictures sent out .....	267

#### Travelling Library circulation:

Regular .....	6,864
Special .....	2,832

#### Open Shelf circulation:

Books .....	21,649
Pamphlets and clippings .....	1,238
Periodicals .....	1,855
	<hr/> 24,742

Books and magazines sent to Banff School of Fine Arts .....	559
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Communities supplied with plays .....	335
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Number of adult single plays sent out .....	1,484
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Number of juvenile single plays sent out .....	63
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Number of adult collections sent out .....	317
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Number of juvenile collections sent out .....	146
	<hr/> 2,010

Number of package libraries for debaters .....	145
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### *Visual Instruction.*

Number of times lanterns loaned .....	45
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Filmslide and miniature projectors loaned .....	10
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Sets of lantern slides sent out .....	503
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Number of times slides used .....	927
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Aggregate attendance, lantern lectures .....	41,622
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Filmslides sent out .....	1,272
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Times filmslides used .....	2,529
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Aggregate attendance, filmslides .....	76,426
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Sets of moving picture films sent out .....	2,412
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Number of reels in sets sent out .....	10,005
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Number of showings given .....	4,719
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Aggregate attendance, moving pictures .....	371,104
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National Film Board showings .....	2,316
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Aggregate attendance, rural circuits .....	299,747
	<hr/> 788,899

### Conferences.

University Week for Farm Young People .....	127	
Refresher Course in Municipal Administration .....	85	
Land Inspectors' Short Course .....	64	
University Short Course and Co-op. Conference .....	250	
Community Art School, Edmonton .....	57	
Community Life Conferences:		
Lac St. Vincent .....	60	
Lake Saskatoon .....	100	
Sangudo .....	267	
Gooseberry Lake .....	225	
	<hr/>	1,235

### Study Groups and Material.

Number of sets of Citizens' Forum bulletins sent out .....	235	
Number of sets on Credit Union sent out .....	68	
Number of sets on Public Speaking sent out .....	81	
Number of sets on Co-operation sent out .....	17	
Number of sets on Post-war problems sent out .....	3	
Number of sets on Canadian Farm Problems sent out .....	2	
Number of sets on So You Want to be An Actor sent out .....	7	
Number of sets on Miscellaneous sent out .....	2	
	<hr/>	
Total number of sets sent out .....		415

### Publications.

#### Press Bulletin:

Number of issues .....	1	
Circulation .....		5,500

#### Agricultural Publications:

Number sent out during the year .....	4,450	
Estimated number of joint series .....	800	
Estimated number of mimeographed circulars on poultry, gardening, etc. ....	1,200	
	<hr/>	
Total .....		6,450

Number of individual requests received ..... 2,040

Total number of bulletins distributed since inception of service... 351,947

#### Stage Door:

Number of issues .....	9	
Circulation (500 each) .....		4,500

### Fine Arts.

#### Drama:

Radio plays produced .....	21	
Number of radio talks (Curtain Going Up) .....	30	
Number of adjudications at Festivals .....	9	
Enrolment at Banff School of Fine Arts .....		214

Number of copies New Canadian plays sold:

Alberta .....	675	
Manitoba .....	150	
	<hr/>	825

Art:

Enrolment at Art Class, Edmonton .....	20	
Enrolment at Art School, Edmonton .....	56	
Enrolment at Art School, Lethbridge .....	13	
	<hr/>	89

*Canadian Legion Educational Services.*

Registration of C.L.E.S. courses .....	2,908	
Attendance at tutorial classes .....	1,876	

Total .....	<hr/>	4,784
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*Alberta Folklore and Local History Project.*

Number of broadcasts given .....	26	
Number of plays written .....	4	
Lectures included under "Extension Lectures."		

*Recapitulation.*

Total aggregate attendance at lectures, lantern slide lectures, film slide programmes, National Film Board programmes, Conferences, Canadian Legion courses .....	813,271	
Total circulation of books, travelling libraries, package libraries, plays, periodicals, study group courses .....	38,392	
Total circulation of Press Bulletin, Agricultural Publications, Stage Door .....	16,450	

*Conclusion.*

As we bring the 31st year of the Department's activity to a close it is encouraging to see on every hand an increasing appreciation of the importance of adult education. Business and community organizations of every description are tending to use the methods and facilities of adult education in promoting community welfare. This is a trend which offers an expanding opportunity for the University and its extension service to make a vital contribution to the building of a more enlightened and effective community.

**Report of the Director of the Provincial Laboratory of Public Health,  
Dr. A. C. Rankin, for the Year 1943**

I have the honour to present the following short report of the work carried on in the Provincial Laboratory during the year 1943.

This work is associated with the controls of infectious disease; the laboratory diagnosis of other conditions; medico-legal examinations, such public health examinations as may be required in relation to water, milk, food, etc.

During the time under consideration numerous samples were examined for the armed forces of Canada and for the United States troops situated in the Province and in the north.

There have been some 10,000 more examinations performed than in the year 1942, mostly in relation to the control of venereal disease and diphtheria. Serological blood examinations numbered 74,000. The standardized test is full of technical difficulties and requires most exacting supervision and careful control. The blood of all recruits in the armed forces is so examined, and the results may be of wide significance. The results from approved laboratories only are accepted by the armed services, and a small fee is paid.

An epidemic of typhoid fever due, on epidemiological grounds, to infected cheese is now in processes of investigation and already one possible source has been discovered. In order that this important investigation might be carried out an encroachment on space devoted to teaching, fortunately for the moment unoccupied, was necessary as a result of the persistently overcrowded conditions in the laboratory. This has been referred to year after year in this report, and has constituted a serious disadvantage to the personnel employed in carrying out even the routine examinations required, to say nothing of emergencies. The usual working conditions of a hard working staff have thus not been available.

Under war conditions technical staff for various well known reasons has been somewhat difficult to hold. During the year there were seven replacements including some key positions necessitating increased supervision, as specifically trained technical help was not available.\* Replacements included also a laboratory boy aged sixty-five years. Additional technical staff, temporary and permanent, have always been authorized as they have been required to meet situations as they arose, and in this respect conditions have been most satisfactory.

During most of the time under consideration, the laboratory was under the administration of Dr. J. J. Ower, who has had the support of a devoted and loyal staff, much of whose work is of such nature as to require attention at irregular hours.

In conclusion, it should be said that we have always had the sympathetic assistance and support of the appropriate University authorities, and that on the whole the year has been one of successful, if strenuous, accomplishment.

Table IX.—Commercial Value of Work if Minimum Charge Were Made, 1943

Sputum .....	568	\$ 1.00	\$ 568.00
Diphtheria and Haemolytic Streptococci.....	3,322	1.00	3,322.00
Typhoid Fever .....	542	1.00	542.00
Milks .....	1,002	3.00	3,006.00
Waters .....	2,812	10.00	28,120.00
Miscellaneous Examinations .....	4,813	3.00	14,439.00
Mother's Milk .....	1	2.00	2.00
Urinalysis .....	118	3.00	354.00
Medico-Legal Examinations .....	11	5.00	55.00
Cerebro-Spinal Fluids for Wassermann			
Test .....	2,445	3.50	8,557.50
Bloods for Wassermann Test .....	8,344	3.50	29,204.00
Bloods for Standard Kahn Test .....	8,885	3.50	31,097.50
Bloods for Presumptive Kahn Test .....	57,605	3.50	201,617.50
Smears for the Gonococcus .....	10,616	1.00	10,616.00
Van Den Bergh Determinations .....	1,467	1.00	1,467.00
Pathological Histological Material .....	6,258	5.00	31,290.00
Blood Smear Examinations .....	109	2.00	218.00
Ascheim Zondek Test .....	259	5.00	1,295.00
Comparative Series .....	17	3.00	51.00
Cerebro-Spinal Fluid Examinations (Col- loidal Gold, Pandey) .....	2,551	2.00	5,102.00
Post-mortem Examinations (Bact.) .....	48	5.00	240.00
B. Abortus Examinations .....	575	1.00	575.00
B. Tularensis Examinations .....	541	1.00	541.00
Typhoid Vaccine (10 cc. quantity) .....	470	.25	117.50
Autogenous Vaccine (25 cc. quantity) .....	14	5.00	70.00
Poliomyelitis Serum (20 cc. quantity) .....	6	2.50	15.00
Stock Vaccine (.25 cc. quantity) .....	14	5.00	70.00
<hr/>			
Total.....			\$372,552.00
Cattle Blood Examinations .....	1,882	\$ .10	188.20
<hr/>			
			\$372,740.20

## Report of the Director of the Industrial Laboratories, Mr. James A. Kelso

During the year, 5,288 examinations or analyses of approximately 200 different substances were carried out.

As usual, necessary court evidence and consultations were given in cases under Dominion and Provincial acts and as required by the R.C.M.P. and government departments. Investigations were carried out for such departments as Attorney General, Trade and Industry, Provincial Secretary (re Fuel Oil Tax Act), Veterinary Laboratory, Alberta Liquor Control Board, etc.

Examinations were made for the Dominion government and American forces in connection with war requirements, particularly the R.C.A.F. and the Department of Pensions and National Health.

Materials of construction and electrical testing are handled by the Departments of Civil and Electrical Engineering, the large number of concrete tests being from plant installations for Canadian and American forces. There has been very close co-operation between these departments and myself, and our arrangements for operation are exceptionally satisfactory for giving the most expert service.

As usual, control water analyses, etc., were run for the University power plant.







REPORT  
OF THE  
BOARD OF GOVERNORS  
AND  
THE PRESIDENT  
OF THE  
UNIVERSITY OF ALBERTA  
1944-45

LIBRARY OF THE UNIVERSITY

ALBERTA

*To the Lieutenant Governor in Council.*

SIR:

On behalf of the Governors of the University of Alberta, and in accordance with section 28 of an Act Respecting the University of Alberta, the undersigned have the honour to transmit through the Minister of Education the Report of the University of Alberta, setting forth the revenues and expenditures for the year ending March 31st, 1945, and the investments as they stood at the end of the fiscal year.

Appended to this report is the Report of the President of the University, covering the academic work of the University for the year, July 1st, 1944, to June 30th, 1945.

ROBERT NEWTON, *President*

H. H. PARLEE, *Chairman*

November 30, 1945



# Financial Statement

## UNIVERSITY OF ALBERTA

### BALANCE SHEET AS AT MARCH 31, 1945

ASSETS			
<b>FIXED:</b>			
Buildings and equipment in service:			
Land, buildings and plant, Schedule No. 2 .....	\$4,126,415.22		
Furnishings and equipment, Schedule No. 3 .....	963,282.57		
			\$5,089,697.79
<b>CURRENT:</b>			
Cash on hand and in bank .....	\$ 59,829.64		
Accounts and fees receivable .....	\$153,362.36		
Less: Reserve for uncollectible accounts ..	2,500.00		
		150,862.36	
Interest accrued .....		1,637.50	
Merchandise held for resale .....		29,278.17	
Dominion of Canada debentures .....		10,000.00	
			251,607.67
<b>PREPAID EXPENSES:</b>			
Supplies on hand .....	\$ 21,666.11		
Unexpired insurance .....	4,089.98		
			25,756.09
<b>OTHER ASSETS:</b>			
Livestock inventory .....	\$ 20,548.25		
Deposit, Workmen's Compensation Board .....	8,564.00		
			29,112.25
<b>TRUST:</b>			
	Par value	Book value	
Investments—Schedule No. 5:			
Dominion of Canada debentures .....	\$213,500.00	\$ 213,584.81	
Province of Alberta debentures .....	658,600.00	652,145.87	
Province of Alberta debentures, past due .....	15,200.00	15,108.40	
Province of Alberta guaranteed debentures .....	7,000.00	7,000.00	
Other bonds and shares .....	10,173.33	10,173.33	
	<u>\$904,473.33</u>	<u>\$ 898,012.41</u>	
Cash on hand and in bank .....		183,761.72	
Mortgages receivable .....		17,830.97	
Loans receivable .....		1,686.98	
Real estate and shares, nominal value .....		15.00	
			1,101,306.18
			<u>\$6,497,479.98</u>



## LIABILITIES

### CAPITAL AND SURPLUS:

Advanced by the Government of the Province of  
Alberta:

Balance at April, 1944.....	\$4,833,420.28
Add:	
Advance for capital assets, Schedule No. 6 .....	14,000.00
Power plant extension, Schedule No. 6 .....	200,000.00
Advances for repairs to residences .....	15,000.00
Implementation of guarantee .....	3,000.00

\$5,065,420.28

Deduct:

Amortization of bond discount .....	4,885.17
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Balance at March 31, 1945 .....	\$5,060,535.11
Capital surplus, Schedule No. 7.....	75,062.78

\$5,135,597.89

### CURRENT:

Imperial Bank of Canada loan.....	\$ 21,000.00
Accounts payable.....	51,961.59
Provision for uncompleted repairs and installations .....	4,041.06

77,002.65

### DEFERRED INCOME:

Fees .....	\$ 14,692.15
Cafeteria tickets .....	498.68

15,190.83

### RESERVES:

Wartime adjustments, Schedule No. 8 .....	\$ 48,931.94
Residence repairs .....	34,553.74
Premium on Rockefeller endowment .....	18,221.66
Operating .....	12,626.79
Unexpended library fees and donations .....	11,284.19
Rink repairs .....	11,110.56
Blood plasma unit .....	10,000.00
Repairs and replacements .....	10,114.44
Workmen's Compensation Board .....	8,039.11
Preliminary building expense, architect .....	3,500.00

168,382.43

### TRUST:

General endowment, Rockefeller Foundations .....	\$ 500,000.00
Scholarships:	
Escheated estates.....	\$200,593.66
General .....	140,742.83

341,336.49

Research .....	74,136.41
Pensions and superannuation.....	67,057.41
Student grants and loans .....	21,371.67
General educational purposes.....	18,221.85
Sundry .....	24,175.32
Amounts administered or held for affiliated organ- izations and others .....	55,007.03

1,101,306.18

\$6,497,479.98

Edmonton, Alberta, August 15, 1945

I have audited the books and records of the University of Alberta for the year ended March 31, 1945.

Operations for the year under review resulted in an excess of revenue over expenditure of \$8,047.79 after carrying to reserve revenues, less direct expenses of \$15,207.13 in respect of courses provided for military and naval personnel and net profit of \$1,758.21 on the dining room operated on behalf of the Royal Canadian Air Force. An amount of \$600.00 has been charged against dining room operations for reserve for repairs and replacements. Skating rink rental of \$2,400.00 has been carried to reserve for rink repairs.

Building, plant, furnishings and equipment are stated in the Balance Sheet at original cost. No provision has been made for depreciation but University officials are of the opinion that the value of furnishings and equipment has been maintained by additions and renewals from revenue.

Inventories of merchandise for re-sale and supplies on hand are certified as to quantities and prices by officials of the University.

Trust investments include Province of Alberta past due debentures of a par value of \$15,200.00. Interest on Province of Alberta direct and guaranteed issues was received during the year at the reduced rates tendered by the Province.

Past due principal on mortgages receivable amounted to \$3,495.92 as at the date of the Balance Sheet.

Capital surplus amounted to \$75,062.78 and arises from the following sources:

Income contributions:

Library .....	\$ 155,334.68	
General .....	26,441.64	
	<hr/>	\$ 181,776.32

Buildings and equipment provided from funds received from Dominion of Canada and Carnegie research .....	93,545.43
Equipment donated and sundry profits .....	19,914.69

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\$ 295,236.44

Deduct:

Capital contributions to income .....	\$ 2,921.46
Capital losses on equipment replaced and abandoned .....	28,419.92
Bond discount .....	188,832.28
	<hr/>

220,173.66

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\$ 75,062.78

Provision for uncompleted repairs and installations represents the estimated liability at March 31, 1945, in respect of unfinished construction.

The reserve for wartime adjustments, \$48,931.94, is comprised of the balance at the close of the previous year together with net revenues from sources provided for military and naval personnel and profit on dining room operated on behalf of the Royal Canadian Air Force amounting to \$14,965.34 less expenditure of \$5,513.42 for completion of the cafeteria.

The reserve for residence repairs is comprised of an amount of \$42,100.00 received from the War Assets Corporation in final settlement of the contract with the Royal Canadian Air Force for use of the University buildings less an amount of \$5,350.86 included therein in respect of rentals and expenditure of \$2,195.40 for repairs.

Subject to the foregoing remarks, I certify that, in my opinion, the above Balance Sheet is properly drawn up so as to show the true financial position of the University of Alberta as at March 31, 1945, according to information and explanations given to me and as shown by the books of the University, and the accompanying Statement of Revenue and Expenditure correctly sets forth the result of operations for the year ended at that date.

C. K. HUCKVALE, C.A.  
Provincial Auditor

UNIVERSITY OF ALBERTA  
STATEMENT OF REVENUE AND EXPENDITURE  
FOR THE YEAR ENDED MARCH 31, 1945

REVENUE

Grants:			
Province of Alberta:			
General .....	\$	602,500.00	
Debt charges, see contra.....		143,152.41	
		<hr/>	
	\$	745,652.41	
Dominion of Canada:			
Department of Labour for accelerated courses....		9,000.00	
		<hr/>	\$ 754,652.41
Fees, net revenue—Schedule No. 9:			
General .....	\$	194,831.55	
Summer School.....		10,312.17	
Examinations .....		7,598.33	
		<hr/>	212,742.05
Interest on Rockefeller Foundation endowment.....			12,500.00
Library fees, see contra.....			7,923.51
Operating departments net revenue as per Statement..			24,910.21
			<hr/>
			\$1,012,728.18

EXPENDITURE

Instructional expense:			
Instructional salaries and direct expenses, net, as per Statement .....	\$	587,520.08	
Upkeep of buildings, Schedule No. 10.....		103,490.66	
Administrative salaries and expenses, Schedule No. 11 .....		51,076.77	
Library salaries and expenses, Schedule No. 12.....		17,766.98	
Provision for library extension, see contra.....		7,923.51	
Calendars and scientific publications, Schedule No. 13.....		5,726.60	
Pensions, arrears, Schedule No. 14.....		5,371.77	
Provost's office, Schedule No. 15.....		1,871.82	
Sundry, Schedule No. 16.....		1,759.35	
		<hr/>	\$ 782,507.54
Public service departments, net expenditure as per Statement .....			79,020.44
Debt charges, see contra.....			143,152.41
			<hr/>
			\$1,004,680.39
Excess of revenue over expenditure for the year ended March 31, 1945.....			<hr/>
	\$	8,047.79	<hr/>

SURPLUS ACCOUNT

AS AT MARCH 31, 1945

Excess of revenue over expenditure for the year ended March 31, 1945 .....	\$	8,047.79	
Add:			
Machine shop inventory not recorded.....		1,000.00	
Sundry old balances transferred from trust accounts		777.84	
		<hr/>	\$ 9,825.63
Deduct:			
Sundry adjustments of previous years' transactions		457.70	
		<hr/>	\$ 9,367.93
Surplus appropriated to operating reserve.....			<hr/>

*To the Governors of  
the University of Alberta*

GENTLEMEN:

I have the honour to submit the following report on the work of the University of Alberta for the year ending June 30th, 1945.

ROBERT NEWTON  
*President*



## *The Report of the President*

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The total number of students in the University in this sixth year of the war was 2,679. This appears to be a decided upturn from the level of about 2,000 we had maintained after the initial wartime decline. Actually the whole gain may be ascribed to our absorption of the Department of Education summer school, which increased our summer session enrollment to 1,070 as compared with 325 the previous year.

Integration of teacher training, towards which the amalgamation of the University and Department of Education summer schools was the first step, has now been completed, and constitutes one of the highlights of our year's history. At the invitation of the Minister of Education, the University has accepted full responsibility for all teacher training in the province. The staffs of the two Normal Schools have been added to the Faculty of Education, and the Normal School buildings placed at the disposal of the Faculty. To maintain liaison between the bodies concerned, a Board of Teacher Education and Certification has been established, with representatives of the Department of Education, the University, and the Alberta Teachers' Association. Longer and more varied educational programs have been approved, in order to raise the standards and broaden the scope of the profession. The whole movement marks a progressive step in the recognition of teaching as a learned profession, entitled to its own university faculty.

An unusual feature of the year, which we accept with mingled feelings, is the retirement of seven members of the staff after long and honorable service to the University. They were all firsts in quality, and six of them were firsts in order of appointment. Dr. John Malcolm MacEachran was the first Professor of Philosophy, the first Provost, and is the last of the initial group selected by President Tory to initiate the Faculty of Arts and Science. He has given 36 years' service to the University. Dr. Allan Coats Rankin was the first Professor of Bacteriology and Hygiene, and the first Dean of the Faculty of Medicine. He gave the University 31 years' service. Professor Norman Charles Pitcher, first Professor of Mining Engineering, retires after 25 years' service. Dr. Egerton Llewellyn Pope, first Professor of Medicine, retired last fall after 21 years' service. Miss Jessie Montgomery was the first Extension Librarian and has served the University for 32 years. Dr. Evan Greene has been Professor of Anatomy, and lays down this office after 25 years' service. Dr. Harry Alexander Gilchrist, first Professor of Prosthetic Dentistry, retired in January with 23 years' service to his credit.

The first four mentioned, having served with great distinction as full-time heads of their respective departments for long periods of time, have been appointed by the Governors of the University of Alberta to be Professors Emeritus.

We bid official farewell to all these colleagues with grateful appreciation for their services and their friendship. Our regret at their retirement is happily tempered by the knowledge that all but one of them have announced their intention of continuing to live in Edmonton where we may still enjoy their friendly contacts. Their departure from the staff of the University marks the end of an era. The University



has grown up. It now takes its place among institutions which are mature yet never grow old, being constantly rejuvenated by a stream of young blood.

Though both political and military leaders were cautious about predicting any probable date for the end of the war, there were not lacking throughout the session signs of their confidence that this was approaching. The closing in November of No. 4 Initial Training School, R.C.A.F., which had occupied our university residence halls for 3½ years, led to negotiations, which were completed in March, for the return of these buildings to the University. They are now being refitted and redecorated for reopening with the summer session. The disbandment of the University Air Squadron at Christmas mystified us a little, since we had understood all three Armed Services intended permanently to maintain units on a similar basis to the Canadian Officers Training Corps. However, the Minister for Air later intimated that it was hoped to revive the university squadrons after the war. The last of a series of 16-week courses for naval ratings training as radio or electrical artificers terminated at Christmas. During the three years these courses were in operation, 938 naval ratings passed through them. They were organized at the request and with the co-operation of Engineer Rear Admiral G. L. Stephens, Chief of Naval Engineering and Construction, Ottawa, who is our Convocation Speaker today (May 15, 1945). During 1941-42 we had given somewhat similar courses to 260 airmen preparing to be radar mechanics. Finally, among signs of approaching peace, acceleration of medical and dental courses has been replaced by deceleration, a process of gradual return to a normal basis.

V-Day in Europe was really D-Day in Canada. Now we must put in motion our plans for rehabilitating returned veterans and building a better world. The presence in our midst this year of 34 returned student veterans has given us a useful preview of their needs. We may easily have ten or twenty times that number next year. The mere physical problem of accommodating them will be very great. Professor E. H. Strickland, himself a veteran of both wars, has been appointed Director of Rehabilitation Courses in the University, and is hard at work on plans for admitting returned men and women three times a year, in January, May and September, instead of in September only. Mr. D. E. Cameron will shortly be relieved of his duties as University Librarian in order that he may devote full time to advisory work with student veterans.

The universities of Canada could join in the celebration of VE-Day with a good conscience. They have done their part in making victory possible. Naturally their direct contribution of men and women to the Armed Forces takes pride of place. Up to February, 1945, this University had records of well over 2,000 enlistments among its sons and daughters. Of these, 130 have given their lives in the great cause of freedom and justice. This University has contributed also its full share to the steady stream of technical personnel required by this highly technical war, and played its full part in solving the innumerable scientific problems posed by the war. When the necessary veil of secrecy is lifted and time permits the preparation of an adequate report, these contributions will be more apparent.

Occasionally men of science are reviled by those who think their contributions have resulted merely in bigger and costlier wars. We read in the papers lately (May 11) that Canadian casualties up to VE-Day included 37,206 dead. That is a heavy price, indeed, but it is still far short of the price in human life we paid in the first World War. Considering the greatly augmented might against which we

were pitted this time, we must honor our scientists for their success in substituting machinery for human flesh and blood, and in perfecting the means for saving the wounded from fatality.

In Ecclesiastes we read:

"There was a little city, and few men within it; and there came a great king against it, and besieged it, and built great bulwarks against it:

"Now there was found in it a poor wise man, and he by his wisdom delivered the city; yet no man remembered that same poor man.

"Then said I, Wisdom is better than strength: wisdom is better than weapons of war: nevertheless the poor man's wisdom is despised, and his words are not heard."

The writer of Ecclesiastes had a profound knowledge of human nature. In extremity we go back to fundamentals. When the danger is past we easily forget those who have helped us. We called upon our universities and our research institutions for help when great armaments were launched against us. Without their help there is no manner of doubt we should have lost the war. Are we yet fully awake to the danger of once more losing the peace, and with it our civilization? The forces of evil have been scotched but not killed. Shall we forget the poor wise man because the danger is less obvious, less imminent? Because it is more insidious, it is all the more dangerous.

There is desperate need to restore sanity in the world, to replace selfishness by magnanimity, the law of the jungle by the golden rule. Education alone will not do it, but in education of the right sort there is lifting up, just as in education of the wrong sort practised by Germany there is pulling down.

Is our educational system developing good citizens, Christian neighbours, world-minded men and women? We should like to answer, Yes, but the evidence is against us.

A British report on the Recruitment and Training of Teachers issued last year explains that, "We have not yet emancipated ourselves from the tradition of educating our children on the cheap." Local press reports during Education Week, November 5 to 11, 1944, revealed that in every province of Canada there are hundreds of "teachers" employed who have little or no professional training—perhaps a summer course, or a three-month short course, or no course at all. We insist that surgeons shall have long years of training before they operate on the bodies of our children, but we nonchalantly permit untrained high school girls to operate on their minds.

The whole structure of our educational system needs radical strengthening from bottom to top. Most people give lip service to education as a potent instrument for building a peaceful world, but comparatively few are ready to add the price of one battleship to what is being spent on education in Canada.

Good is the only antidote for evil, beauty for ugliness, truth for error. These things we can secure if we are willing to spend enough on the right kind of education.

Appended to this report are tabular data concerning war service of students and staff, academic staff numbers, academic appointments and promotions, return from war service, retirements and leave of absence, student registration, gifts, new scholarships and prizes, staff publications, and reports of the Deans, Directors, Librarian, Provost, and Commanding Officers of Service training units.

**Table I.—Record of War Service of Students and Staff**

*Serving in the Armed Forces*

Graduates .....	1,214
Overseas .....	429
In Canada and the United States.....	785
Undergraduates .....	795
Overseas .....	171
In Canada and the United States.....	624
Academic Staff .....	30
Overseas .....	14
In Canada and the United States.....	16
Administrative Staff .....	19
Overseas .....	4
In Canada and the United States.....	15
	<hr/>
	2,058

*Casualties*

Killed in action or presumed dead .....	117
Prisoners of War .....	11
Missing .....	17
	<hr/>
	145

*Total Enlistment\** ..... 2,203

*Decorations, Mentions in Dispatches, etc.*

D.S.O., 2; M.C., 6, one with bar; George Medal, 1; U.S. Silver Star, 1; O.B.E., 8; M.B.E., 2; British Empire Medal, 2; D.F.C., 16; Mentioned in Dispatches, 8; King's Commendation for Valuable Service, 1; Royal Red Cross, First Class, 1; Royal Red Cross, Associate, 2; Air Force Cross, 1.

**Table II.—Academic Staff Numbers**

*Full-Time Teaching Staff*

Professors .....	46
Associate Professors .....	28
Assistant Professors .....	33
Lecturers .....	16
Instructors .....	16
Demonstrators and Assistants.....	1
	<hr/>
	140

*On War Service:*

Professors .....	1
Associate Professors .....	2
Assistant Professors .....	6
Lecturers .....	4

\* This record is as complete as present information allows (April 30, 1945), but is subject to enlargement when full details of enlisted personnel become available.

### Part-Time Teaching Staff

Professors .....	20	
Associate Professors .....	2	
Assistant Professors .....	9	
Lecturers .....	23	
Instructors .....	47	
Demonstrators and Assistants .....	10	
Student Assistants .....	80	
		— 191
On War Service:		
Assistant Professors .....	2	
Lecturers .....	3	
Instructors .....	17	
Demonstrators .....	4	

### Department of Extension

Director .....	1	
Assistants .....	3	
Librarian .....	1	
Rockefeller Fellow .....	1	
		— 6

### Library

Librarian .....	1	
Assistants .....	2	
		— 3

### Industrial Laboratories

Director .....	1	
Assistant .....	1	
		— 2

### Department of Industrial Research

Research Professor .....	1	
Assistant Research Professor .....	1	
Research Chemist .....	1	
Chemist .....	1	
Compiler .....	1	
Assistant Chemists .....	4	
		— 9

Total Academic Staff.....	351	===
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**Table III.—Academic Appointments and Promotions**

### Faculty of Arts and Science

John Malcolm MacEachran, M.A., Ph.D., LL.D., Professor Emeritus of Philosophy.

Ernest Sydney Keeping, B.Sc., D.I.C., from Assistant Professor to Associate Professor of Mathematics.

Andrew Stewart, B.S.A., M.A., from Assistant Professor to Associate Professor of Political Economy.

Robert George Hall Cormack, M.A., Ph.D., from Lecturer to Assistant Professor of Botany.

Jules Tuba, M.Sc., Ph.D., from Lecturer to Assistant Professor of Biochemistry.

James Howden Whyte, M.Sc., Ph.D., from Lecturer to Assistant Professor of Botany.

Max Wyman, B.Sc., Ph.D., from Lecturer to Assistant Professor of Mathematics.

David Grant Embree, B.A., Sessional Instructor in History.

James George Knudsen, M.Sc., Sessional Instructor in Chemistry.

#### *School of Household Economics*

Sheila Jean Murray, B.Sc., Instructor in Household Economics.

#### *Faculty of Agriculture*

Laird Ward McElroy, M.Sc., Ph.D., from Assistant Professor to Associate Professor Animal Husbandry.

Donald Robert Clandinin, M.S.A., from Lecturer to Assistant Professor of Poultry.

#### *Faculty of Applied Science*

Norman Charles Pitcher, B.Sc., Professor Emeritus of Mining Engineering.

Allan Douglas Hogg, B.Sc., Ph.D., from Lecturer to Assistant Professor of Mechanical Engineering.

Ronald Edward Phillips, B.Sc., Sessional Instructor in Electrical Engineering.

#### *Faculty of Dentistry*

Harry Alexander Gilchrist, D.D.S., F.A.C.D., Honorary Professor of Dentistry.

Sperry David Fraser, D.D.S., from Instructor to Lecturer in Prosthetic Dentistry.

Roderick Archibald McEwen, D.D.S., from Demonstrator to Lecturer in Prosthetic Dentistry.

Robert Arthur Rooney, D.D.S., from Instructor to Lecturer in Operative Dentistry.

James Donald Hawkins, D.D.S., Instructor in Operative Dentistry.

#### *Faculty of Education*

\*George Murray Dunlop, M.A., Associate Professor of Education.

Olive Margaret Fisher, B.Ph., M.A., Associate Professor of Education.

John William Gilles, M.A., M.Ed., Associate Professor of Education.

George Kendrick Haverstock, B.A., Associate Professor of Education.

Goldwin Smith Lord, M.A., LL.D., Associate Professor of Education.

Hugh Alton Macgregor, M.Sc., Associate Professor of Education.

Gerald Frederic Langley Manning, M.A., B.Ph., Associate Professor of Education.

William Dewar McDougall, M.A., Associate Professor of Education.

Joseph Morrow Scott, M.Sc., Associate Professor of Education.

George Kennedy Sheane, M.A., Associate Professor of Education.

Rae Chittick, R.N., B.Sc., M.A., Assistant Professor of Education.

\*Andrew Leo Doucette, M.A., Assistant Professor of Education.

Arthur William Emanuel Eriksson, B.Sc., M.A., Assistant Professor of Education.

Irvine Henry Graham, A.L.C.M., B.A., M.A., Assistant Professor of Education.

Evangeline Alberta Hastie, B.A., Assistant Professor of Education.

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\* On War Service.

Gertrude Cornelia Higgin, B.A., Assistant Professor of Education.

\*Jonas Christian Jonason, M.A., Assistant Professor of Education.

Zella Jeanne Oliver, M.A., Assistant Professor of Education.

Genevieve Twomey, B.A., Assistant Professor of Education.

\*Theophilus George Finn, Lecturer in Education.

Mary Isabelle Grant, B.Sc., Librarian Instructress.

#### *Faculty of Law*

George Hobson Steer, K.C., M.A., Acting Dean of the Faculty of Law.

#### *Faculty of Medicine*

Allan Coats Rankin, C.M.G., M.D., C.M., D.P.H., F.R.C.P.(C), Professor Emeritus of Bacteriology.

Egerton Llewellyn Pope, B.A., M.D., C.M., F.R.C.P., F.R.C.P.(C), Professor Emeritus of Medicine.

John William Scott, M.D., C.M., F.R.C.P.(C), F.A.C.P., Professor of Medicine and Director of Medical Services.

Kenneth Hamilton, B.A., B.A., M.B.B.Ch., F.R.C.P.(C), M.R.C.P., from Assistant Professor to Clinical Professor of Medicine.

Helen Reid Chute, M.D., Sessional Instructor in Pediatrics.

Charles Lefebvre, Sessional Instructor in Clinical Medicine.

#### *School of Nursing*

Virginia Pearson, B.Sc., R.N., Science Instructor.

#### *Department of Extension*

Flora Macleod, M.A., B.L.S., Extension Librarian.

#### *Department of Physical Education*

Kathleen Emily Beatrice Foskett, B.A., from Instructor to Lecturer in Physical Education.

#### **Table IV.—Return from War Service**

Kenneth Hamilton, B.A., B.A., M.B.B.Ch., F.R.C.P.(C), M.R.C.P., Assistant Professor of Clinical Medicine.

#### **Table V.—Retirements and Leave of Absence**

Allan Coats Rankin, C.M.G., M.D., C.M., D.P.H., F.R.C.P.(C), Dean of the Faculty of Medicine and Professor of Bacteriology and Hygiene, to retire August 31, 1945.

Egerton Llewellyn Pope, B.A., M.D., C.M., F.R.C.P., F.R.C.P.(C), Professor of Medicine and Director of Medical Services, to retire August 31, 1945.

John Malcolm MacEachran, M.A., Ph.D., L.L.D., Professor of Philosophy, to retire August 31, 1945.

Norman Charles Pitcher, B.Sc., Professor of Mining Engineering, to retire August 31, 1945.

Jessie Fleming Montgomery, B.A., Extension Librarian, to retire August 31, 1945.

Harry Alexander Gilchrist, D.D.S., F.A.C.S., Professor of Prosthetic Dentistry, retired December 31, 1944.

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\* On War Service.



George Malcolm Smith, M.C., M.A., Dean of the Faculty of Arts and Science and Professor of History, granted sick leave.

Malcolm Murray MacIntyre, B.A., LL.B., LL.M., S.J.D., Dean of the Faculty of Law and Professor of Law, granted leave of absence for 1944-45.

Morden Heaton Long, M.A., Professor of History, granted leave of absence for 1944-45.

James Augustus Romeyn, B.A., M.D., Assistant Professor of Bacteriology, granted leave of absence for war service.

Grace Lesley Duggan, B.Sc., B.Ed., M.S., Lecturer in Household Economics, granted leave of absence for 1944-45.

**Table VI.—Registration by Faculties—Session 1944-45 (1943-44 in brackets)**

Total Registration .....				2679(2023)
		Men	Women	Total
<b>I.—Full Session Students .....</b>				972(1097) 593(566) 1565(1663)
(1) Faculty of Arts and Science .....		237( 239)	274(276)	511( 515)
	Men Women Total			
B.A. ....	22(31) 79( 76)			101(107)
B.Sc. ....	76(99) 64( 58)			140(157)
School of Commerce .....	19(19) 14( 13)			33( 32)
School of Household Economics .....		97(107)		97(107)
Combined Courses:				
B.Sc., M.D. ....	70(64) 8( 6)			78( 70)
B.Sc., and/or D.D.S. ....	31(11) ....( 2)			31( 13)
B.A., B.Ed. ....	2( 2) 7( 9)			9( 11)
B.Sc., B.Ed. ....	6( 3) 4( 3)			10( 6)
B.Com., B.Ed. ....	..( 1) 1( 1)			1( 2)
B.A., B.Com. ....	1 .....			1
B.A., LL.B. ....	10( 6) ....( 1)			10( 7)
(2) Faculty of Agriculture .....		60( 65)	....( 1)	60( 66)
(3) Faculty of Applied Science .....		346(368)	2( 1)	348( 369)
(4) Faculty of Dentistry (including accelerated courses June to December, 1944, and January to September, 1945) .....	51	3		54
Less 3 men to be carried forward into 1945-46, out of 6 men and 1 woman in accelerated fourth year, January to September, 1945 .....	3	....		3
	—	—		—
		48( 74)	3( 2)	51( 76)*
(5) Faculty of Education .....		68( 46)	92( 73)	160( 119)
B.Ed. ....	25(11) 62( 46)			87( 57)
B.Ed. in H.Ec. ....	3 .....			3
B.A., B.Ed. ....	2( 2) 4( 1)			6( 3)
B.Sc., B.Ed. ....	1( 3) .....			1( 3)
Partial .....	40(26) 21( 15)			61( 41)
Special .....	2 .....			2
Accelerated Education, May, 1943 .....	( 4) ( 11)			( 15)
(6) Faculty of Law .....		9( 17)		9( 17)
(7) Faculty of Medicine .....		160( 206)	195(197)	355( 403)
Medicine (including accelerated courses June to December, 1944, and January to December, 1945) .....	163	20		183
Less 17 men and 2 women to be carried forward into 1945-46, out of 35 men and 5 women in accelerated 4th and 5th years. January to December, 1945 .....	17	2		19
	146(194)	18(21)		164(215)*

\* "Deceleration" accounts for apparently dwindling numbers in Medicine and Dentistry.

Nursing Degree .....	69( 78)	69( 78)		
Nursing Diploma .....	79( 88)	79( 88)		
Public Health Diploma .....	4( 2)	4( 2)		
Pharmacy Degree .....	11( 7)	19( 4)	30( 11)	
Pharmacy Diploma .....	3( 5)	6( 4)	9( 9)	
(8) Graduate Students .....			72( 62)	22( 12) 94( 74)
M.A. ....	16(13)	8( 2)	24( 15)	
M.A. in Ed. ....	1( 1)		1( 1)	
M.Sc. ....	8(11)	( 1)	8( 12)	
M.Sc. in Ag. ....	15(13)		15( 13)	
M.Sc. in App. Sci. ....	5( 4)		5( 4)	
M.Ed. ....	17(17)	2( 1)	19( 18)	
Special .....	10( 3)	12( 8)	22( 11)	
( 9) Divinity .....			9( 10)	9( 10)
(10) Special .....			5	5
(11) Auditors .....			1( 10)	10( 4) 11( 14)
II.—Summer Session Students (1944).....			283( 167)	787(158) 1070( 325)
III.—Short Courses .....			19( 35)	71( 64) 90( 99)
(1) Summer Session for graduate Nurses (May 27 to August 6, 1944) Public Health Nursing Ward Teaching and Supervision .....	27( 45)	27( 45)		
(2) Special Course in Prac- tical Obstetrics, 3 months (beginning end of September, 1944) ....	4( 4)	4( 4)		
(3) Short course for Ad- ministrators for small hospitals, 10 weeks beginning end of Janu- ary, 1945.) .....	8( 11)	8( 11)		
Special 6 week course in Biochemistry 51.52 June 1 to July 15, 1944)	2	11	13	
(5) Creamery Short Course (February 19 to March 17, 1945.) .....	17(35)	1( 4)	18( 39)	
1. Full Session Students.....			1015(1097)	598(566) 1613(1663)
II. Summer Session Students (1944) .....			283( 167)	787(158) 1070( 325)
III. Short Courses .....			19( 35)	71( 64) 90( 99)
			1317(1299)	1456(788) 2773(2087)
Less duplicates .....			51( 39)	43( 25) 94( 64)
Total.....			1266(1260)	1413(763) 2679(2023)

Table VII.—Gifts

From the National Research Council, \$10,311.73 to the Department of Plant Science; \$1,055 to the Department of Soils; \$3,521.26 for war research in other departments; \$500 for cancer research; \$35.64 for natural gas research.

From the Dominion Department of Labour, \$9,000 for accelerated courses in Medicine and Dentistry.

From Standard Investments Limited, through Mr. Justice Parlee, \$7,500 for the President's Scholarship Fund.

From the "Friends of the University"; 131 individual members, \$1,172.26; Canadian Western Natural Gas, Light, Heat and Power Company, Limited \$1,400 for scholarships in the Faculty of Applied Science; an anonymous donor, \$50.00 for Dr. Sandin's cancer research; Dean W. Scott Hamilton, \$50.00 to supplement the Friends' Bursary in Dentistry; Burns & Co. Limited, \$1,000 for research in the Department of Animal Science.

From the Robert Tegler Trustees, \$900 for the purchase of an autotechnicon to assist cancer research in the Department of Pathology; \$800 to the loan fund of the Returned Men's Association.

From the Royal Canadian Air Force, the equipment of No. 4 R.C.A.F. Nutritional Laboratory.

From the Rockefeller Foundation, \$6,800 in support of the Alberta Folklore and Local History Project; \$2,000 for research work in the Department of Political Economy.

From the Canadian Social Science Research Council, \$1,000 to assist research in the Department of Political Economy.

From the Ciba Company Limited, \$1,000 for research in the Department of Biochemistry.

From the United Grain Growers Limited, \$1,000 for research in the Department of Plant Science, and \$300 for the Department of Animal Science.

From Canada Malting Company, \$1,000 for research work in the Department of Plant Science.

From Mrs. J. H. Woods, the second of three annual gifts of \$500 to assist Dr. Sandin's cancer research.

From Canada Packers Limited, \$300 for poultry research in the Department of Animal Science.

From the Alberta Linseed Oil Company Limited, \$250 in aid of linseed oil studies in the Department of Chemistry.

From the Calgary Power Company Limited, \$50.00 for soil corrosion investigations in the Department of Civil Engineering.

From the Department of National Defence Auxiliary Services, through Major F. L. Crumblehulme, a set of silk-screen reproductions of paintings by Canadian artists.

From the James F. Lincoln Arc Welding Foundation, \$109.70 for the purchase of books for "The James F. Lincoln Arc Welding Foundation Welding Library."

From the Philosophical Society, \$90 for the purchase of books for the Library.

From the Science Association, a bound volume of "Temperature and Other Meteorological Records", by H. R. Webb.

From Mr. Harry Cohen, a set of the Jewish Encyclopaedia for the Library.

From Major S. R. Halton, a file of the "Maple Leaf" for the Library.

From Miss Margery MacKenzie, a copy of "The Rhodes Scholarships" for the Library.

From Mrs. Helen Brett, the engraved silver trowel used by the late Dr. R. G. Brett in laying the corner-stone of the Medical Building.

From the Calgary Brewing and Malting Company, a 15 h.p. steam engine and a 17 h.p. motor for use in the Mechanical Engineering Laboratory.

From the Junior Chamber of Commerce, \$25.00 to the loan fund of the Returned Men's Association.

From Dr. W. M. McCallum, \$10.00 to the loan fund of the Returned Men's Association.

From Mr. Robert Cochrane, a fossil for the Museum.

From Mr. Donald MacLachlan, a trade gun for the Museum.

### Table VIII.—New Scholarships and Prizes

From the Consolidated Mining and Smelting Company of Canada, Limited, \$750 annually for the Cominco Graduate Research Fellowship, to be awarded to a graduate in Science, Engineering, or Agriculture, for research in the general field in which the Company is interested.

From the Maple Leaf Milling Co., Limited, \$2,200 for a two-year graduate scholarship in the Department of Plant Science.

From the Ogilvie Flour Mills Company, \$500 to provide a graduate scholarship in the Department of Animal Science.

From the Law Society of Alberta, the Viscount Bennett Bursaries in Law, supported by a trust fund of \$12,000 donated to the Society for this purpose by Viscount Bennett.

From the Edmonton Jewish Federation, \$100 annually for a scholarship in the Faculty of Education.

From the B'nai B'rith Lodge, \$50 annually to raise the Edmonton B'nai B'rith Scholarship to \$100.

From the Edmonton Section, National Council of Jewish Women, \$50 annually to raise the scholarship supported by that organization to \$100.

From Mr. Henri Seyrig, Cultural Representative, Provisional Government of France, New York, \$189 for scholarships in the Oral French Section of the Banff School of Fine Arts.

From the Canadian Daughters League of Jasper, a \$50 prize awarded to the Jasper student entering the University with the highest Grade XII standing.

### Table IX.—Publications by Staff

#### *Department of Animal Science*

Sinclair, R. D. Breeding efficiency as influenced by nutrition. C.S.T.A. Rev., 43:20-25. 1944.

#### *Department of Bacteriology and Hygiene*

Bow, M. R. The Maternity Hospital Act of Alberta. Can. J. Pub. Health, 12:461-467. 1944.

#### *Department of Biochemistry*

Tuba, J., Hunter, G., Patrick, M., and Kennedy, L. L. On sources of vitamin C from native fruit preparations. J. Can. Diet. Assoc., 6:55-58. 1944.

Tuba, J., Cantor, M. M., and Hunter, G. Bio-assay of vitamin C in rose hips. Can. J. Res., E 23:1-4. 1945.

Tuba, J., Hunter, G., and Kastelic, J. Approximate nutrient composition of dried rose hips. Can. J. Res., E 23:5-7. 1945.

Cantor, M. M., with Pilcher, Major F., R.C.A.M.C., Ottawa. Renal function tests. Can. J. Med. Tech., 6:131-141. 1944.

Cantor, M. M., and Scott, J. W. Effect of vitamin B<sub>6</sub> (pyridoxine) in the treatment of leucopenia and granulocytopenia of toxic origin in humans. Science, 100:545-546. 1944.

Cantor, M. M., with Burke, G. (Vancouver). The treatment of Simmonds' disease with male sex hormones. Can. Med. Assoc. J., 52:275-277. 1945.

Cantor, M. M., and Scott, J. W. Agranulocytic angina effectively treated with intravenous pyridoxine (vitamin B<sub>6</sub>). Can. Med. Assoc. J., 52:368-371. 1945.

Cantor, M. M. Chemical research and medical progress. Calgary Associate Clinic Hist. Bull. June, 1945.

#### *Department of Civil Engineering*

Morrison, I. F. Representation of rigid rotations. J. Appl. Phys., 802. December, 1944.

Morrison, I. F. The principles of soil mechanics. Roads and Bridges. April and May, 1945.

#### *Department of Dairying*

Reynolds, R. M., and Thornton, H. R. Distribution of *Flavobacterium maloloris*. Sci. Agr., 24:21-23, 1943.

Thornton, H. R. and Dunkley, W. L. Milk and cream defects of farm origin. Univ. Alta. Bull. 43, pp. 37. 1944.

Dunkley, W. L. and Sommer, H. H. The creaming of milk. Univ. Wisconsin Res. Bull. 151, pp. 56. 1944.

Dunkley, W. L. Inaccuracy in cream neutralization. Dairymen's Digest, 1(6):5. 1945.

#### *Department of Education*

Argue, K. F. Educational personnel problems in Alberta. Report to Alta. Post-War Reconstruction Comm., 57 pp. 1943.

Argue, K. F. What Canadian youth thinks of its education. Report of the Subcommittee on Education, Can. Youth Commission, pp. 1-35. 1945.

#### *Department of Entomology*

Brown, J. H. The spotted fever tick in Alberta. Dept. Health Public. 1945.

Brown, J. H. Sylvatic plague. Dept. Health Public. 1944.

Brown, J. H. Sylvatic plague: A note on the probable relationship of flea index to epizootic plague in ground squirrels in Alberta. J. Ent. Zool., 36(3):70-71. 1944.

Brown, J. H. Sylvatic plague: A note on the finding of large numbers of fleas on ground squirrels (gophers) in Alberta. Bull. Brooklyn Ent. Soc., 39(3):80-82. 1944.

Brown, J. H. The fleas (Siphonaptera) of Alberta, with a list of the known vectors of sylvatic plague. Ann. Ent. Soc. Amer., 37(2):207-213. 1944.

#### *Department of Geology*

Allan, J. A. The relation of the geology to the soils in the Wainwright and Vermilion sheets. Coll. Agric. Univ. Alta. Bull. 42, 106-122. 1944.

Allan, J. A. John Wesley Shipley. Trans. Roy. Soc. Can., Sec. IV, 38:125-128. 1944.

Rutherford, R. L. Regional structural features of the Alberta foothills and adjacent mountain ranges. Trans. Roy. Soc. Can., Sec. IV, 38:71-77. 1944.

Warren, P. S. The drainage pattern in Alberta. Roy. Can. Inst., 25(1):1-14. 1944.

Warren, P. S. Index brachiopods of the Mackenzie River Devonian. Trans. Roy. Soc. Can., Sec. IV, 38:105-135. 1944.

#### *Department of Mathematics*

Campbell, J. W. An Introduction to Mechanics (rev. ed.) pp. 288 ix. Edwards Bros. September, 1945.

Campbell, J. W. Motion with respect to moving axes. Amer. Math. Mon., 51(7):377-381. 1945.

Wyman, M. Static isotropic solution of Einstein's field equations. Phys. Rev., 66:267-274. 1944.

#### *Department of Mining and Metallurgy*

Clark, K. A. Hot water separation of Alberta bituminous sand. Trans. Can. Inst. Min. Met., 47:257-274. 1944.

Clark, K. A. Some physical properties of a sample of Alberta bituminous sand. Can. J. Res., F 22:174-180. 1944.

#### *Department of Plant Science*

Rose, Dyson, and McCalla, A. G. Effects of limiting ions on the absorption of nutrients by wheat. Can. J. Res., C 22:87-104. 1944.

Shoemaker, J. S. Means of preventing winter injury. Proc. West. Can. Soc. Hort., 1:20-25. 1944.

Shoemaker, J. S. Chlorosis of fruit trees and its prevention. Proc. West. Can. Soc. Hort. 1:14-16. 1944.

Shoemaker, J. S. Adaptability of gladiolus varieties. Ann. Can. Glad. Soc. pp. 142-153. 1944.

Shoemaker, J. S. The gladiolus corm: Its structure and functions. Ann Calgary Glad. Soc., pp. 1-8. 1944.

Staff of the Department of Plant Science. Seasonal notes from the Department of Plant Science. Univ. Press Bull. January, 1945.

#### *Department of Political Economy*

Hewetson, H. W. The future of Canada's north country. Public Affairs, 8(2): 73-79. 1945.

Hewetson, H. W. Transportation in the North. Can. J. Econ. Pol. Sci., 11(3):450-466. 1945.

Stewart, A. Rural electrification. Alta. Post-War Reconstruction Comm., 24 pp: 1945.

#### *Department of Soils*

Wyatt, F. A., Newton, J. D., Bowser, W. E., Odynsky, W., and Allan, J. A. Soil survey of Wainwright and Vermilion sheets. Univ. Alta. Bull. 42. 1944.

Bowser, W. E. and McCalla, A. G. Cropping for profit and permanency. Univ. Alta. Bull. 44. 1944.

#### *Department of Zoology*

Miller, R. B. Suggestions for experiments in the control of the pike-whitefish tapeworm, *Triaenophorus crassus*. Dept. of Lands and Mines, Govt. Alta., 15 pp. December 1944.

Miller, R. B. Studies on cestodes of the genus *Triaenophorus* from fish of Lesser Slave Lake, Alberta. III. Notes on *Triaenophorus nodulosus* (Pallas) in the second intermediate host. Can. J. Res., D 23:1-5. 1945.

Miller, R. B. Abnormal viscera and vascular connections in *Rana pipiens*. Copeia, 4:241-244. 1944.

Miller, R. B. Trout culture. Dept. of Lands and Mines, Govt. Alta., January 1945.



## Research Council of Alberta

Stewart, A. Rural electrification in Alberta. Res. Coun. Alta. Report 36, 107 pp. and App. I. and II. 1944.

Stansfield, E., and Lang, W. A. Coals of Alberta. Res. Coun. Alta. Report 35, 174 pp. 1944.

Research Council of Alberta, Annual report for 1943, 14 pp. 1945.

## EXCERPTS FROM THE REPORTS OF ADMINISTRATIVE OFFICERS

### Report of Dr. R. K. Gordon, Acting Dean of the Faculty of Arts and Science

#### 1.—*Registration.*

During the regular academic session, 1944-45, 511 students were registered in the Faculty of Arts and Science as compared with 515 in 1943-44 and 582 in 1942-43.

#### 2.—*Recommendations for degrees.*

The number of students recommended for degrees at the Convocation of 15th May, 1945, was as follows:

For the B.A. Degree .....	34
For the B.Sc. Degree .....	65
For the B.Com. Degree .....	10
For the Degree of B.Sc. in Household Economics.....	19

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128

#### 3.—*Legislation.*

During the session the discussion of the two pre-medical years of the B.Sc., M.D. course which began 1943-44 has been continued. Two changes have been agreed on by both the Faculty of Medicine and the Faculty of Arts and Science:

- (1) To require only half of Mathematics 40 and to move Mathematics 44A (a half-course) from the second to the first year;
- (2) To change the following words in the description of the second year—"A further course in French or German; or a senior course in English or History" to read, "A senior course from the biological sciences; or a senior course in English or History". The effect of the second change is that a student who is not prepared to take French 2 or German 2 in his first year will, as at present, do French 1 or German 1, but it will be regarded as an extra and will not count towards his degree. He will then be obliged, either at summer school or in his second year, to do French 2 or German 2 to complete his first year programme.

The first of these two changes is to take effect in 1945-46; the second a year later.

A committee is considering further possible changes in the pre-medical years.

A course in the Russian language will be offered for the first time in 1945-46. This will be taught by Dr. Ignatieff, if he has been released by the Army, with assistance from Dr. Owen. If Dr. Ignatieff is not available, the course will be given by Dr. Owen.

4. A Committee on the Curriculum, appointed by Dean Smith, has met throughout the session and hopes to have definite proposals to lay before the

Faculty Council next session. The main purpose of the Committee is to suggest changes tending towards greater coherence and concentration in the general courses both on the B.A. and the B.Sc. side.

5. Following the Christmas term examinations, two students were reported to the War Services Training Board as failing and were therefore required to withdraw. These students, both of whom were men, were reported to the Mobilization Board as not entitled to further postponement of military service.

6. During the year, all men who were candidates for the B.Sc. degree, except pre-medical and pre-dental students, were registered with the Wartime Bureau of Technical Personnel.

7. Students have again loyally carried out the requirements of the University in respect of training in the C.O.T.C., and the U.A.T.C., the U.N.T.D. and the Women's Auxiliary Corps. At the beginning of 1945 the U.A.T.C. was disbanded, and most of its members were transferred to the C.O.T.C.

8. Dr. J. M. MacEachran, the first Professor of Philosophy, is retiring at the end of the present session, after a term of service which goes back almost to the very beginning of the University.

Professor M. H. Long has been away on leave of absence for the session. He has been writing the second volume of his history of Canada.

Dean Smith has been away almost the whole year through illness. It is earnestly hoped that he will be well and back at work again next fall.

### Report of Professor F. G. Winspear, Secretary of the School of Commerce

The School has commenced to meet its plans for the post-war period. The Board of Governors have confirmed a full-time appointment to the Department of Accounting in the person of Associate Professor J. D. Campbell, and consideration will be given to the expansion of the courses as referred to in last year's report. The School, however, will continue to recognize the importance of the humanitarian and cultural courses.

Whereas the full-time student registration reflects a decrease of one student, the first-year registration reflects an increase of 7. Total registration of 31, may be classified as follows:

	Men	Women	Total
First year .....	12	6	18
Second year .....	3	2	5
Third year .....	3	5	8
	—	—	—
	18	13	31
	==	==	==

This registration compares with 32 for the year 1943-44, 51 for the year 1942-43, 65 for the year 1941-42, 84 for the year 1940-41, and 96 for the year 1939-40. The ratio of men to women undergraduates has declined due to the impact of the war. Indications are, however, that the facilities of the School will be in heavy demand in the post-war period, as a result of expanded registration of both veterans of the armed services and high school graduates.

## Report of Professor Mabel Patrick, Director of the School of Household Economics

Registration for the degrees of B.Sc. and B.H.Ec. this year was as follows:

First Year (including 4 B.H.Ec.) .....	41
Second Year (Including 3 B.H.Ec.) .....	33
Third Year .....	25

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99

Other students following courses in Household Economics:

H.Ec. 10 (1st year Education) .....	9
H.Ec. 41 (2nd year Education) .....	5
H.Ec. 51 (General Arts and Science taught with 10) .....	1
H.Ec. 52 (General Arts and Science and Education, taught with other classes) .....	1

H.Ec. 36 (1st year B.Sc. in Nursing):

1st term .....	23
2nd term .....	16

H.Ec. 62 (5th year B.Sc. in Nursing) .....

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69 168

Senior Students in Household Economics have been getting some practical experience in the Cafeteria. The dietitian in charge plans to study cafeteria management this summer in a university where the organization is similar to our own. There has been a change in the course of study, becoming effective in 1946-47, which will mean one course less in the senior year. As a result, the students will have more time, and we hope to make better use of the facilities of the cafeteria for teaching purposes.

The demand for graduates in Household Economics continues to be in excess of the supply. It might be possible to take steps to increase the registration in this course, but laboratory facilities in the Department of Household Economics are being used to the limit. With an additional course for students in Education next year, laboratory space will be at a premium.

## Report of Dean R. D. Sinclair of the Faculty of Agriculture

The activities of the Faculty of Agriculture in the University of Alberta may be separated into two main divisions, (1) academic and (2) experimental, and for convenience in presenting this report they will be sub-divided under these headings.

It should be noted however that, in addition to teaching and conducting experimental work, members of the staff of the Faculty of Agriculture engaged in a certain amount of extension work during the year 1944-45 and in this way continued to maintain a close contact with the farm people of Alberta as well as to inform urban groups regarding the contribution which agriculture is making to the common welfare. Such extension media as publications, radio talks, addresses at farm meetings, agricultural short courses and field days, personal interviews, and direct correspondence were utilized in making experimental results and general information available to the farm population. Close co-operation was offered by all Departments to the Department of Extension of the University and the Extension Service of the Alberta Department of Agriculture.

## 1.—*Academic.*

During the 1944-45 academic session 60 students were enrolled in the Faculty of Agriculture as compared with 65 for the 1943-44 term. Of the first year students, 4 entered from the Provincial School of Agriculture at Olds and 12 entered direct from high schools. Six students were admitted to the course in Agriculture under arrangements of the Post Discharge Rehabilitation Order P.C. 7633. A total of 14 students were registered with courses qualifying them for the degree of B.Sc. in Agriculture.

It is believed that the low spot in connection with wartime registrations in the Faculty of Agriculture has been reached and that there will be an increase in numbers during the 1945-46 term. Numerous enquiries have been received from prospective students who have been discharged from the armed services or who expect to obtain their discharge before the opening of the new term. Then, too, a certain number of students who interrupted their course in Agriculture have returned from military service and have declared their intention of continuing their studies.

Students in the Faculty of Agriculture were maintained in the "science student" category and were subject to the regulation and direction of the Wartime Bureau of Technical Personnel, Department of Labour, Ottawa. Co-operation was extended to National Selective Service in issuing permits for students to seek summer employment and in directing them to an appropriate type of summer activity.

Students of the 1945 graduating class have been enrolled with the Wartime Bureau of Technical Personnel. A strong demand continues to exist for the services of agricultural graduates. There has been a noticeable increase in interest on the part of industrial organizations in the employment of agricultural graduates. This is particularly true in the case of packing companies.

Fifteen students were registered in the School of Graduate Studies and were engaged in what were regarded as essential research projects. Of this number six completed the requirements for the M.Sc. degree.

During the year a Creamery Short Course was offered under a joint arrangement between the Dairy Department and the Dairy Branch of the Alberta Department of Agriculture. The students who registered in this course received financial assistance through the Dominion-Provincial War Emergency Training Programme.

A two-day Short Course for officers administering the Veterans' Land Act was held during the month of April. While the course was confined mainly to a study of soils certain other agricultural problems received consideration.

During the year a committee of the Faculty undertook a study of the desirability and feasibility of offering a senior programme of study in the field of food technology. It was felt that recent developments in connection with dehydration, refrigeration, and other processes in relation to food products should be recognized and that opportunity should be provided for a certain number of students to emphasize this phase of agriculture in their senior years. The committee reported favourably in connection with such a plan and found that a reasonably satisfactory grouping of subjects could be arranged within the present University curriculum although the desirability of a special course in Physics was indicated. The Faculty approved an option under the designation of "Processing Agricultural Products" and it is anticipated that this will meet the requirements of students who may be preparing

to associate themselves with industries mainly concerned with the processing of foods and feeds.

Professor Strickland returned from military service during the year and resumed his position as Professor of Entomology. Dr. V. Ignatieff of the Department of Soils continues on leave of absence for active military service and Mr. A. S. Ward fills his position on a temporary basis.

The Faculty of Agriculture has noted with satisfaction that post-war building plans within the University include the erection of a Biological Science Building which will accommodate the main departments within the Faculty. Anxiety continues regarding the possibility of shortage of lecture and laboratory accommodation for agricultural students during the post-war rehabilitation period.

It may be appropriate to record that of the 429 students who have graduated in Agriculture from the University of Alberta at least 90 have joined the various branches of the Armed Services in the present world war.

## *2.—Experimental.*

Research in the Faculty of Agriculture was assisted materially during the year by a number of grants, including one to the value of \$45,000, contributed by an anonymous donor. This latter grant made it possible to initiate a number of new projects in which several departments in the University are co-operating.

Special attention was paid by the Department of Agricultural Engineering during the year to the machinery used in the harvesting of sugar beets and some time was spent in the Lethbridge area in this connection. Acting as Consultant to the Farm Machinery Rationing Appeal Board took a considerable amount of the time of the Professor of Agricultural Engineering and connections with the National Advisory Committee on Agricultural Engineering also increased the amount of work and opportunity for service.

Research work in the Department of Animal Science was strengthened during the past year by the establishment of a modest animal nutrition laboratory. While it has not been possible to equip this laboratory completely, due to scarcity of certain materials, sufficient accommodation has been provided to make possible the initiation of certain detailed investigations in animal nutrition. Experiments to determine the value of vegetable proteins in swine feeding were continued and an investigation into the importance of protein and vitamin supplements for breeding sows was started. Further work was done on the value of urea as a protein supplement for dairy cattle and pregnant ewes and further progress was made in studying the role of cobalt in sheep nutrition. The dual purpose cow herd was maintained during the year and an additional year's information was obtained on the value of cover crop for finishing beef cattle. In connection with poultry research, special attention was given to riboflavin in poultry rations and the synthesis of this vitamin factor by the developing embryo. The research work in the Department of Animal Science was assisted by grants from the Consolidated Mining and Smelting Company, Burns and Company, Ogilvie Flour Mills Company Limited, Canada Packers Limited, Carnegie Research Foundation, and the Agricultural Research Trust Fund.

The twenty-third Annual Feeders' Day was held on June 3rd, 1944, and a group of from 400 to 500 farmers and farm women attended.

In the Department of Dairying a study of rancidity in cream and butter was undertaken with funds provided through the Agricultural Research Trust Fund.



Several interesting points of practical import have emerged from the preliminary phases of this investigation and a paper on the subject is in manuscript form.

In view of the fact that Professor Strickland just returned to the University during the year from military service, after an extended leave-of-absence, no research was conducted by the Department of Entomology.

At the opening of the 1944-45 academic term the Departments of Field Crops and Horticulture were amalgamated into a Department of Plant Science. The Professor of Field Crops was designated as Chairman of the new department.

Research in the Department of Plant Science included studies with hard and soft wheats, barley, oats, and flax. The soft wheat work has reached a stage where decided progress should be made in the selection of new types of material. Good progress has also been made in barley selections. The biochemical and physiological laboratories were engaged in work on: (a) quality of wheat; (b) chemical and physical properties of plant proteins; (c) sugar production in barley plants; (d) assistance in co-operative projects. The work in the Division of Plant Pathology included a continuation of studies on *Aerobacillus polymyxa* and the production of 2,3-butyleneglycol; studies with new fungicides and studies on antibiotic substances produced by micro-organisms. The usual investigations with horticultural crops were carried out during the year.

The usual heavy demand for seed grain was experienced and approximately 2,500 bushels of Titan barley produced in 1944 were distributed. Victory oats were in strong demand. Small amounts of Ferax alfalfa seed were available commercially for the first time and improvement work with this crop is continuing. A new planting of Triticum-Agropyron hybrids was made and studies are being continued.

Substantial grants for research in Plant Science were received from the National Research Council of Canada, the Agricultural Research Trust Fund, Canada Malting Company, United Grain Growers, Nangatuck Chemicals, and the Maple Leaf Milling Company. The Canadian Seed Growers' Association financed testing work on horticultural seeds.

Visitors' Day was held on July 29, 1944, and while rain interfered with the success of the event a worth-while group of visitors attended and were shown through the laboratories and greenhouses.

The regular soil surveys carried on by the Department of Soils were curtailed considerably (920,000 acres on the Red Deer Sheet) but the surveys for the purpose of irrigation extension (80,000 acres) and the northern surveys (500,000 acres) were increased. These surveys were financed by the Dominion Department of Agriculture. Irrigation surveys and surveys in the northern area are urgently needed in preparation for a rehabilitation programme. The irrigation surveys conducted during the year were in the area eastward from Taber and the northern surveys in the Peace River district from Hines Creek to the British Columbia border.

An inspection survey dealing with the inoculation and fertilizer requirements for seed peas was carried out in the area from Lethbridge to Edmonton. The usual investigational work of the Department of Soils, including fertilizer treatments especially on the wooded soils of Alberta, was continued during the year.



Publications issued during the year for farmers' use were:—

*Bulletin:*

- No. 10 Binder and Knotter Troubles (Sixth Revision) Assistance Alberta Department of Agriculture.
- No. 19 Sheep Production in Alberta (Fourth Revision) Assistance Alberta Department of Agriculture.
- No. 41 Care and Feeding of Dairy Cattle.
- No. 42 Soil Survey of Wainwright and Vermilion Sheets.
- No. 43 Milk and Cream Defects of Farm Origin.
- No. 44 Cropping for Permanency and Profit.

*Circular:*

- No. 4 Legume Inoculation (Third Revision) Assistance Alberta Department of Agriculture.

**Report of Dean R. S. L. Wilson of the Faculty of Applied Science**

The number of students in this faculty is 348, compared with 369 last year. The distribution among years and departments is:

Pre-Engineering (veterans) .....	7
First Year (5 veterans) .....	146
including Veteran Partials .....	2
Women .....	1
Second Year (1 veteran) .....	54
comprised of Chemical .....	6
Civil .....	23
Electrical .....	24
Mining .....	1
Third Year .....	91
comprised of Chemical .....	30
Civil .....	18
Electrical .....	33
(including Women 1)	
Eng. Physics .....	3
Mining .....	7
Fourth Year .....	50
comprised of Chemical .....	12
Civil .....	14
Electrical .....	15
Eng. Physics .....	3
Mining .....	6
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Total .....	348

In addition to the above there are:

R.C.N. 8th and 9th Electrical Artificers Courses, May 15-Sept. 8, 1944 .....	128
10th Electrical Artificers Course, Sept. 11-Dec. 22, 1944 .....	64
Soils Mechanics and Concrete, a refresher course, Jan. 15-19, 1944 .....	134
Prospectors' Short Course, Feb. 14-March 16, 1944 .....	21

Usual standards of academic achievement have been maintained by students. Returned men from the Armed Forces have resumed studies after periods of inter-

ruption varying from a few months up to ten years. Generally, their serious attitude and maturity offset the difficulties of restoring the mental habits necessary to successful study.

About two-thirds of this year's graduates have been accepted by the Navy and Army for training for commissions.

N. C. Pitcher, Professor of Mining Engineering, retires this year after twenty-five years' service as head of the department of Mining and Metallurgy. The development of the department to its present position of high esteem among graduates and employers throughout Canada is due mostly to the skill, wisdom, and character of Professor Pitcher as teacher, administrator, and colleague. He has made an important contribution to the growth of the University and to the society it serves.

The completion of the Navy courses makes necessary some changes of junior staff in the department of Electrical Engineering.

Expected increases in numbers of fourth year students next session in chemical, civil, and electrical engineering departments will require further appointments of junior staff.

Junior drafting courses will be given in future in the former R.C.A.F. canteen building west of Assiniboia Hall. The amount of space available here is about the same as in Convocation Hall where drawing classes have been housed for more than fifteen years. The distance between the canteen and other class rooms is inconvenient but there will be fewer interruptions and less disturbance of the kind encountered in Convocation Hall. Proper lighting arrangements will now be possible.

Estimates of numbers of students in the several years and departments next session can be only very approximate. Conjectures based on the manpower requirements for war and the rate and time of discharges from the Armed Forces seem to indicate increased rather than decreased demands on our facilities. Difficult problems may have to be faced and solved before another regular (or special) session begins.

Laboratory space and equipment have been extended and improved in the Civil and Electrical Engineering departments. Limited accommodation in both Chemical and Mining departments may necessitate further divisioning of classes and possibly a slight change of curriculum in fourth year Chemical Engineering.

The usual acknowledgements are due to members of the staff for their services throughout the year.

#### Table X.—R.C.A.F. and R.C.N. Courses at the University of Alberta

##### *First Radio Mechanics Course, R.C.A.F.*

June 2-September 10, 1941 .....	120 men for 14 weeks
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##### *Second Radio Mechanics Course, R.C.A.F.*

March 23-July 17, 1942 .....	65 men for 16½ weeks
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##### *Third Radio Mechanics Course, R.C.A.F.*

July 27-November 20, 1942 .....	75 men for 16½ weeks
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<i>Total R.C.A.F. Courses</i> .....	260
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##### *First Electrical Artificers Course, R.C.N.*

May 15-August 31, 1942 .....	100 men for 15½ weeks
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<i>Extended E.A. Course, R.C.N.</i>		
August 31-October 2, 1942 .....	25* men for	9 weeks
<i>Second Electrical Artificers Course, R.C.N.</i>		
October 5, 1942-January 30, 1943 .....	64 men for	16½ weeks
<i>Third Electrical Artificers Course, R.C.N.</i>		
February 1-May 22, 1943 .....	64 men for	15½ weeks
<i>First Radio Artificers Course, R.C.N.</i>		
November 30, 1942-March 20, 1943 .....	53 men for	15½ weeks
<i>Second Radio Artificers Course, R.C.N.</i>		
March 29-July 16, 1943 .....	50 men for	15½ weeks
<i>Fourth and Fifth Electrical Artificers Course, R.C.N.</i>		
May 24-September 17, 1943 .....	132 men for	16½ weeks
<i>Third Radio Artificers Course, R.C.N.</i>		
July 26-November 15, 1943 .....	54 men for	16 weeks
<i>Sixth Electrical Artificers Course, R.C.N.</i>		
September 20, 1943-January 14, 1944 .....	64 men for	16½ weeks
<i>Fourth Radio Artificers Course, R.C.N.</i>		
November 22, 1943-March 10, 1944 .....	52 men for	15 weeks
<i>Seventh Electrical Artificers Course, R.C.N.</i>		
January 17-May 12, 1944 .....	63 men for	16½ weeks
<i>Fifth Radio Artificers Course, R.C.N.</i>		
April 10-July 28, 1944 .....	50 men for	15½ weeks
<i>Eighth and Ninth Electrical Artificers Course, R.C.N.</i>		
May 15-September 8, 1944 .....	128 men for	16½ weeks
<i>Tenth Electrical Artificers Course, R.C.N.</i>		
September 11-December 22, 1944 .....	64 men for	14½ weeks
<i>Total R.C.N. Courses</i> .....		938
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<i>Total R.C.A.F. and R.C.N. Courses</i> .....		1198
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### Report of Dean W. Scott Hamilton of the Faculty of Dentistry

The fourth year class in the Faculty of Dentistry is continuing on the accelerated programme until September, 1945, at which time they will graduate. In addition to this class, we had only two others—first and second year—taking instruction during the session 1944-45. The latter two classes are not on the accelerated programme and completed their instruction at the regular time in April of this year.

At a special Convocation ceremony held on January 6th of this year eleven students graduated in Dentistry, all of whom were immediately commissioned by the Canadian Dental Corps.

A number of students have received financial assistance through the Dominion-Provincial grants and from loans furnished through the Kellogg Foundation fund which is held in this University.

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\* Duplicates of some of those in course immediately preceding, hence not included in total.

Throughout the year members of this Faculty have been called upon to give clinics and lectures at various points in western Canada, including the Convention of the Western Canada Dental Association at Regina.

The need for larger quarters and modern equipment is the item of prime importance in this Faculty. We are already receiving large numbers of applications for post-war admission and, with our present facilities, it will be impossible for us to make any appreciable contribution to dental education for returning personnel. We have also had a number of inquiries with respect to refresher courses for men returning from the Canadian Dental Corps. In order to meet this, as well as undergraduate problems, it will be necessary for us to increase our teaching staff as soon as suitable men are available.

### Report of Dean M. E. LaZerte of the Faculty of Education

#### *Summer Session 1944:*

The year began with the summer session of 1944 that was conducted from July 17th to August 26th. In previous years two summer sessions were conducted, one by the Department of Education and the other by the University of Alberta. On or about February 1st, 1944, the Department of Education requested the Faculty of Education to assume responsibility for all in-service training of teachers on the assumption that all teacher-training might become, within the next year, the responsibility of the Faculty. In anticipation of the changes that have since taken place, the Faculty of Education offered a varied program of courses in the summer session and gave to each the rank of an undergraduate course in the B.Ed. program.

In the 1944 summer session, the registration in the Faculty of Education was as follow:

Candidates for the B.Ed. ....	158
Candidates for the B.A., B.Ed. ....	3
Candidates for the Diploma in Education .....	29
Candidates for the M.Ed. ....	8
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	198

#### *Winter Session—1944-1945.*

Registrations in the Faculty during the regular winter session are summarized in the following table.

	Men	Women
(a) Full-time attendance, undergraduate candidates for B.Ed. (1, 2, 3 years) .....	23	55
(b) Full-time attendance, undergraduate candidates of 3rd and 4th years of combined degree programs.....	3	4
(c) Full-time attendance, graduate candidates for B.Ed. and H.S.C. ....	2	7
(d) Part-time attendance, undergraduate candidates for B.Ed.	16	5
(e) Part-time attendance, graduate candidates for B.Ed.....	4	2
(f) Extramural graduate candidates for B.Ed.....	20	14
(g) School of Graduate Studies, part-time attendance.....	3	.....
(h) School of Graduate Studies, extramural registrants.....	15	2
(i) Candidates in 1st and 2nd years, combined degree programs	8	12

(j) B.Ed. in H.Ec.—1st year .....	3
(k) Special—New Haven girls .....	2
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	94 106

#### *Prospective Graduates.*

If students who are candidates for degrees and diplomas are successful in the present year's work, the convocation list will be as follows:

To receive the Junior diploma .....	20
To receive the Senior diploma .....	29
To receive the B.Ed. degree .....	27
To receive the B.Ed. degree and Senior diploma .....	32
To receive the M.A. Degree .....	1
To receive the M.Ed. degree .....	5
To receive the B.A., B.Ed. degrees and Senior diploma.....	2
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	116

#### *Student Exchange:*

Thanks to the initiative of the Canadian-American Women's Committee on International Relations, an exchange of students was arranged between New Haven State Teachers' College and the University of Alberta. From March 1st to March 25th inclusive, two New Haven students, Miss Jeanne Smith and Miss June Sprague, were registered in the Faculty of Education in the following courses: Classics in English 51, Education 492, History 58, Zoology 1 and 2. Miss Anne Herman and Miss Catherine Pierce left Edmonton on April 28th to visit New Haven for the month of May.

This exchange of students is, in my opinion, quite worth while. We have recorded our thanks to those who financed all expenses, namely, The Friends of the University (University of Alberta), the Canadian Section of the Canadian-American Committee on International Relations, and the Carnegie Endowment for International Peace.

#### *Participation in Extension Services:*

Members of the staff assisted liberally in extension services of the University. Their contribution is summarized thus:

Member	Public Lectures	Radio Talks
Dr. H. E. Smith .....	10	2
Dr. K. F. Argue .....	14	...
Dr. M. E. LaZerte .....	6	1

#### *Integration of Teacher Training.*

On April 1st, 1945, the Minister of Education gave to the University of Alberta full responsibility for training Alberta's teachers.

Liaison between the Department of Education and the University is maintained by a Board of Teacher Education and Certification whose members represent the Department of Education, the University of Alberta, and the Alberta Teachers' Association. This Board is authorized to make recommendations to the Minister of Education and to the President of the University respecting programs of instruction, expenditures on these programs, appointments to the staff of the Faculty of Education, and regulations governing the certification of teachers.

The Faculty of Education has added to its staff the permanent members of the two Normal School staffs, with the result that the teaching staff of the Faculty has increased from three to twenty-six in number.

New programs of study and regulations relating thereto have been approved by the Council of the Faculty of Education and when endorsed by the Board of Teacher Education and Certification will be published immediately in the 1945-46 Faculty of Education calendar and become effective in September, 1945.

The major changes in curricula now being introduced include:

- (a) The lengthening of the basic teacher-training period from one to two years.
- (b) The inclusion of the two-year basic training period as the first two years of a four-year undergraduate program that qualifies for a B.Ed. degree.
- (c) A four-year B.Ed. program for all teachers, whether of primary, elementary or secondary grades.
- (d) A B.Ed. program with a common core of subjects supplemented by a fairly wide range of options, so arranged that by appropriate selection of these options a teacher may major in primary, elementary or unspecialized high school subjects, or prepare for semi-specialization in the fields of household economics, industrial arts, commerce, or physical education.
- (e) A modified and more flexible graduate program that permits students to continue in graduate years the subjects stressed in undergraduate programs.

The Faculty of Education is to be housed in the future in the former Provincial Normal School. Plans are under way for the provision of extra basement rooms in the building. As soon as the space is ready for occupancy, the Faculty of Education will move to it from its present crowded quarters in St. Joseph's College.

In the new Faculty of Education unit there will be under-graduate students of four different years, graduate students, elementary school pupils of grades I to IX and secondary school pupils of grades X to XII inclusive. A general shop, a household economics centre, and a commercial classroom will together form a much needed addition to the curricular offerings of University High School.

The Faculty of Education has been given new responsibilities that will strongly motivate all members of its staff. The University of Alberta is the first Canadian university to be given full responsibility for the training of teachers. The Faculty of Education has no final answers to the many problems that will arise, or to some that are already with us, but the entire assignment is an invitation to thought, experimentation and evaluation that is full of interest.

On behalf of the Council of the Faculty of Education, I thank President Newton for all the assistance he has given us throughout this period of readjustment.

### **Report of Dean A. C. Rankin of the Faculty of Medicine**

*Nursing*—Miss M. McCulla, Acting Director.

The enrolment of the School of Nursing for 1944-45 was as follows: 74 in the diploma course and 69 in the degree course. Five more students are included in the diploma group, being affiliated students from the Ponoka Mental Hospital.

The Advanced Course in Practical Obstetrics was again in progress for the first three months of the fall term. Mrs. Barbara Eban, Sessional Instructor, was in charge of this group. Four students were accepted for the course and received their certificates in January. This course is continuing to arouse interest in many



parts of Canada and the students themselves feel most enthusiastic about this project. It has enabled them to undertake their duties and responsibilities with confidence and ability. The course will be offered in the fall of 1945.

The second session of the Summer School for Graduate Nurses was successfully completed with 47 nurses registered, 27 taking the Public Health Nursing programme and 20 registered in the alternative, Ward Teaching and Supervision. It is hoped to offer another term this summer.

This course has been offered with the financial assistance of the Alberta Association of Registered Nurses. Similarly, with the continued assistance, an eight-weeks' course was offered during the months of February and March for Administrators of small hospitals. Eight senior graduates attended, receiving certificates in March. Reports indicate that this course has met an urgent need in rural hospitals in Alberta.

These courses increased the number of students enrolled in the School of Nursing by 59 in one year. The major difficulty encountered in this expansion was the lack of space in which to work.

The resignation of Miss Helen MacArthur, Acting Director, was accepted, effective in June, 1944, and Miss Madeline McCulla was appointed to succeed her.

Mrs. Virginia Pearson was appointed as the nurse Science Instructor for the School of Nursing and came on the staff in the fall of 1944.

Miss Hazeldine Bishop, Director of the Council of Social Agencies, was appointed as Sessional Instructor in social case work to succeed Miss Lillian Thomson.

The courses which have been offered in the past two years have met a great need in Alberta in both the Public Health Nursing field and the hospital administration and teaching field. The need, however, is great to establish a permanent programme for candidates interested in the hospital field. Many promising, potential students are lost to other areas and to other provinces due to this lack in our present school.

*Pharmacy*—Dr. A. W. Matthews, Director.

A total of 37 students enrolled in the School of Pharmacy for the 1944-45 session. The distribution was as follows: First Year, 28, 18 women, 10 men; Second Year, 6, 3 women, 3 men; Third Year, 1 woman; Partial Students, 2 women. One woman student withdrew from the first year at the end of the first half of the session. Lectures were given, as in former years, to two classes of nurses at the University of Alberta Hospital in Materia Medica.

Following action taken by the Council of the Alberta Pharmaceutical Association at its 1944 Annual Meeting, and later confirmed by revision of the Pharmacy Act in March, 1945, the degree course in pharmacy has become the minimum college prerequisite to license to practise pharmacy in Alberta. At the same time the apprenticeship requirement was discontinued and a plan for pharmaceutical internship instituted. Under this new plan a student may enter the School of Pharmacy as soon as the matriculation requirement has been met but a total of 24 months of practical experience must be obtained before the licence will be granted. Time spent at University does not count toward this total but evidence of practical experience obtained during the inter-sessions will be accepted. The School of Pharmacy has been requested to continue the diploma course for a short time for the benefit of

candidates who have completed apprenticeship under the old system or who may have entered military service before completing apprenticeship. Permission to enroll in such diploma course will be determined by the Council of the Association on the merits of each case. As a consequence of the above noted changes, all but five of the class entering in September, 1944, are enrolled for the degree course.

The first of the new units for the dispensing laboratory has been constructed in the Works Department and will be ready for installation at the close of this session. It is expected that another unit will be proceeded with in order to be ready for the 1945-46 session.

The need of increased laboratory space to meet the post-war requirements of the School is again emphasized. From the number of ex-service men who have already made arrangements or indicated they will apply for entrance into Pharmacy, it seems probable that the present facilities of the school will be strained as early as September, 1945.

The School of Pharmacy again organized a two-day Refresher Course in conjunction with the Annual Meeting of the Alberta Pharmaceutical Association. The extension bulletin service for Alberta pharmacists was also continued.

Dr. M. J. Huston completed his graduate study at the University of Washington in August, 1944, and returned to his post in September. Miss Rose Wannop, B.Sc., again assisted with the junior courses on a part-time basis.

#### *Medicine.*

Since last year's report, one class of accelerated students numbering 32 graduated on January 6th, 1945. Of these, 30 were enlisted students in the Royal Canadian Army Medical Corps. One enlisted student subsequently passed supplemental examinations and will be graduated on May 15th, 1945. This will bring the total number of graduates in Medicine to 542, equivalent to an annual output of 27 graduates during the past 20 years. Of these 34 are women.

At present an accelerated session involving a fourth year class of 21 students and a fifth year class of 19 students is in progress. When these classes have been graduated in January, 1946, and September, 1946, respectively, acceleration will be finally terminated.

During the year arrangements were completed on academic grounds for the addition of one month to the academic session of the first four years in Medicine. This will come into operation in the session 1945-46 for the first, second and third years. As a result of "deceleration" there will be no fourth year during this session and as a consequence, unfortunately, no graduates in the spring of 1947.

As the armed forces have extended the permissible period of internship from eight to twelve months, the present fifth year is very fortunately receiving the benefit of one calendar year in undergraduate internship. At present there are only 109 students proceeding to the degree in Medicine. This is due to the war during which the number of students qualifying for admission has gradually fallen below normal, and as a result of "deceleration" there are only four years in attendance. To this however must be added the 33 students who finished classes in December, 1944, making a total registration of 143 during the session.

The members of the instructional staff, reduced by one-fifth, that is by twenty persons, as a result of the war, have maintained their faithful and prolonged efforts as required by acceleration. They have performed almost constantly with only short

intermissions since July, 1941. As we are now dealing with normal term first and second year students, we have had an opportunity of observing the favourable effects this is having both from an academic and health point of view.

In co-operation with the Medical Sub-Committee of the Canadian Medical Procurement and Assignment Board tentative arrangements have been completed whereby refresher courses of twelve weeks' duration, to be held in the University Hospital, will be made available to discharged medical officers under professional rehabilitation regulations. It is thought that some of the two thousand medical officers now serving in the armed forces who graduated from the Canadian medical schools in accelerated courses during the war will be desirous of refresher instruction with reference to certain phases of medical practice. These courses are contingent on the return of some of our instructional personnel by the Armed Forces at demobilization. A few fellowships in the pre-clinical departments will also be available and the hospitals are arranging for senior internships and residencies. Already many enquiries are being received regarding post-war post-graduate instruction. While there will be no lowering of matriculation standards, personnel discharged from the armed forces will receive all possible consideration for entrance to the study of medicine.

Under the usual arrangements with the Canadian Medical Association, Alberta Division, the fourteenth annual Refresher Course is now in progress with a large attendance. Through co-operation of the Medical Director General (Navy), the Director General of Medical Services (Army), and the Director of Medical Services (Air), an interesting programme has been arranged. In addition, the Committee on War-Time Graduate Medical Meetings sent Dr. Edwin E. Osgood, Associate Professor of Medicine, University of Oregon Medical School, and Dr. Richard L. Varco, Department of Surgery, University of Minnesota. Dr. J. R. Fraser, Professor of Obstetrics and Gynaecology, delivered the first Conn Memorial Lecture under the auspices of the University of Alberta Medical Alumni on Tuesday, May 8th, and also spoke to the meeting. Col. R. P. Strong, U.S.A.M.C., Director of Tropical Medicine, Army Medical School, U.S.A., delivered three addresses. The Director General of Treatments, Department of Veterans' Affairs, Brigadier W. P. Warner, also addressed the meeting.

The opening of the Department of Veterans' Affairs, Colonel Mewburn Pavilion, has increased the bed capacity of the University Hospital to 700 beds. With the completion of the Department of Veterans' Affairs Psychopathic Reception Unit and the Provincial Government Tuberculosis Hospital, facilities for the teaching of psychiatry and tuberculosis will be improved. The formation of a separate department of Psychiatry will then be possible. As registration after the war will, without doubt, be greater than ever before, some expansion in staff and clinical teaching facilities will be essential. Construction of the new nurses' home will be commenced this summer.

### **Report of Dr. J. Macdonald, Acting Chairman of the School of Graduate Studies**

1. During the academic year, 1944-45, 72 students have been registered in the School of Graduate Studies in candidature for higher degrees.

The distribution of graduate students, according to degrees sought, has been as follows:

Degree	Men	Women	Total
Master of Arts .....	16	8	24
Master of Science .....	8	.....	8
Master of Science (Agriculture) .....	15	.....	15
Master of Science (Applied Science) .....	5	.....	5
Master of Arts (Education) .....	1	.....	1
Master of Education .....	17	2	19
	—	—	—
	62	10	72

In addition, 22 graduates who are not candidates for any higher degree have been registered in the School as Special Graduate students.

The distribution of candidates for higher degrees according to Departments has been as follows:

Animal Science .....	4	Field Crops .....	6
Applied Science .....	5	History .....	3
Biochemistry .....	1	Horticulture .....	1
Chemistry .....	7	Philosophy and Psychology.....	6
Education .....	20	Political Economy .....	4
English .....	11	Soils .....	3
Entomology .....	1		—
			72

2. Virtually all the candidates for the degree of Master of Arts and for higher degrees in Education have been extra-mural students engaged in teaching or in other employment. Candidates for the degree of Master of Science have been in attendance during the regular academic session. Many have been engaged on projects of war research. The presence of others not so engaged has been with the approval of the Mobilization Board.

### Report of the Librarian, Mr. D. E. Cameron

During the year the work of the Library, so far as service to the student body is concerned, has been maintained as efficiently as possible. The difficulties of administration have, however, been more serious than in any of the earlier war years. Miss Giffen has fortunately continued to serve in the Medical Library, and for some months we had the service of a trained cataloguer, but otherwise we have had to depend on temporary help, which requires training before being of great use, and in January we lost three full-time assistants, owing to war conditions, within three weeks. The result was that we had to resort to student help, with fragmented hours, so that the strain of our two regular staff members in Reference and Circulation has been unusually great for the second half of the term, and the Cataloguer has had again to train an assistant. Further, the handing over to the Cataloguer of the work of forwarding orders and keeping track of their filling has been necessary by the new duty placed on the librarian in connection with ex-service personnel. Miss Hamilton and Mr. Appelt have borne the brunt of the present situation with great cheerfulness, but relief in regard to trained staff is urgent, and as soon as trained personnel again become available, should be taken care of.

The need for further trained staff will become imperative with the development of the Library of the Faculty of Education, which, with some 13,000 volumes in sight, of which about 3,000 are uncatalogued, provides a task of some magnitude.

These books are now dispersed, some being in use and some in storage, and at least those which will be in use during the Summer School must be got ready in time for the beginning of the term. At present no trained assistants are in sight. The Library Schools are asking students to present themselves for training, and there has been no diminution so far of the number of library assistants in the Auxiliary Services. Relief, however, should soon be in sight.

The condition of the retail and wholesale book trade has been very difficult, as no priority was allowed for employees in the book trade. Our agents have had to inform us that they can only handle a portion of our orders—in some cases about a third—as publishers cannot deliver and they cannot collect. An appeal to another large house received the reply that no new account could be received, as staff was recently reduced by a further ten per cent. The result has been that we have a very large backlog of unfilled orders, which we hope soon to be able to correct. Correspondence has been proportionally heavy, and fruitless.

In journals there has been printing of short editions, and resultant missed copies, but it is hoped that this will soon end with the relaxation of controls on paper. Altogether this has been our worst year in these respects.

Our binding programme has however been well maintained, as a fair supply of materials was procured when a possible shortage became a possibility. We have also done a good deal to build up journal files, and constant watch is kept on offerings in this field.

The use of the Medical Library by the practitioners of the Province has become a marked feature of the Library's work, and shows increased appreciation of this service.

Mail service to outside students has kept up well, and the benefit to students of the reduced postal rate has been amply demonstrated.

Two members of the staff are still on national service. In view of the needs of the staff for the immediate post-war period, steps are being taken to ascertain whether they propose to return to the Library on discharge.

During the year the Librarian had a first conference with Mr. Mather, the Architect, and the Library is ready to submit its suggestions when the time comes for the consideration of details affecting the proposed plan.

The Librarian wishes to express his thanks to the members of the staff for patience and loyalty through a definitely trying year, and would add that the student help pulled us through a difficult period.

No special comment is needed on the student users of the Library. This year showed a continuation of the serious concern of the students with their work; if anything, the air was one of strain and over-seriousness.

For the convenience of Summer School students in particular a collection of reference books previously administered from St. Joseph's College has been taken over by the Library by purchase, as joint administration of the collection was found to be inconvenient to all concerned.

During the year donations were received as follows: The Philosophical Society again made a gift of \$90.00 from its funds, which was expended on the purchase of a wanted reference work, "Essay and General Literature Index"; Mr. Harry Cohen of Edmonton very generously presented to the Library a set of the new "Jewish Encyclopedia"; three volumes were received from the Macy Foundation,



New York; Major Seth Halton, an interesting file of the overseas "Maple Leaf"; a volume on "Ukrainian Literature", from the Ukrainian Canadian Committee; "The Sculpture of Michael Angelo", from Mrs. Worden of Grimshaw; "Annual Belgian Handbook", from the Belgian Consulate; original edition of "Catlin's Indian", from Mr. M. J. Warner, Edmonton; a volume of the "Rhodes Scholarships", from Miss M. MacKenzie; publications of the Provincial Research Council; a file of State and Provincial Publications, Health Authorities of North America; two volumes on Claude Bernard, from the University of Mexico; Catalogue of Insects Predators, from Department of Agriculture, Ottawa; publications of the Carnegie Institution and Carnegie Endowment; publications of Social Research Council; Catalogue of Flowering Plants, etc. from Professor C. W. Lowe, Manitoba; three volumes, "Tracts on Liberty", from Mr. Surplis, Calgary; one volume from American Can Co., "Coals of Alberta", from Professor Stansfield; individual volumes presented by Dr. J. J. Ower, Mr. J. Spillios, Consolidated Vultee Aircraft, Mr. Ray Milner, Dr. A. R. Munro, Dr. T. H. Shastid, of Duluth, The Polish Telegraph Agency, Dr. D. Ewen Cameron of McGill University; from various Universities, publications in gift or on exchange.

All of the above have been suitably acknowledged. The number of accessioned volumes is 80,202; increase in the year, 3,505.

### **Report of the Provost, Dr. J. M. MacEachran.**

#### **1.—Committee on Student Affairs.**

Two meetings of the Committee on Student Affairs were held during the session. The business conducted was mainly of a routine character—approving of the budget of the Students' Union at the first meeting, and hearing the reports of the Treasurer and President of the Students' Union at the second. Certain minor amendments to the Constitution of the Students' Union were also approved. At the final meeting it was recommended that in the future this Committee should meet four times during the session and that more time be given to the discussion of problems affecting the welfare of the student body and the University generally.

#### **2.—Students' Union.**

The affairs of the Students' Union have been successfully carried on by an efficient Students' Council under the able leadership of Mr. Alfred Harper, President of the Students' Union. The Council has been very cramped for office space during the War period and it is hoped that, with the return of the Residences to the University and the acquisition of the R.C.A.F. drill-hall by the University, more adequate provision may be possible for the administration offices of the Students' Union before the beginning of the 1945-46 session.

#### **3.—Financial.**

The report of the Treasurer of the Students' Union showed a surplus of \$412.21 as at March 31st, 1945. While a few bills still remained to be paid it was confidently stated by the Treasurer that a small surplus would still remain at the end of the session.

#### **4.—Building Fund.**

As the building fund is now approaching the \$50,000 mark, it was thought that the post-war development plans should provide for a Students' Union Building. The proposal is that a building to cost \$150,000 might be undertaken—half the cost



to be shared by the Students' Union and half by the Government. At a recent meeting of the Committee on Students' Athletics, however, the question rose as to the advisability of attempting to secure an up-to-date gymnasium instead of the Students' Union Building in the meantime. It was felt that the proposed development of Physical and Health Education, including Athletics, would necessitate much more adequate facilities than the R.C.A.F. drill-hall can provide, and that for the next few years satisfactory accommodation for the Administration Offices of the Students' Union might be arranged in the lower floor of the North Wing of Athabasca Hall, formerly used as part of the Infirmary.

#### 5.—*War Services Funds.*

##### (1) Therapy Unit Drive.

During the session the sum of \$1,500 was raised to purchase a skin therapy unit for the Colonel Mewburn Wing of the University Hospital.

##### (2) Christmas Fund.

The Christmas Fund Committee raised and contributed approximately \$550 for hampers which were sent out to and distributed by district nurses in the northern part of the Province.

##### (3) I.S.S. Fund.

The students contributed \$300 to the Central International Students' Service, which has its Headquarters in Geneva. This fund is used for assisting students of occupied countries to pursue a university education.

##### (4) Blood Donors.

During the first few weeks of the session 910 students enrolled as blood donors. Up-to-date, however, only about half that number have been called upon.

##### (5) Magazine Drive.

About 2,000 magazines were collected by the Dental Society and sent to the Armed Forces overseas.

##### (6) Alumni Cigarette Fund.

The sum of \$400 was collected from campus service organizations and handed over to the Edmonton Alumni Association for sending to Alumni overseas.

In view of the amount of time required for the various drives which came on at different times, the Students' Council has recommended that a Community Chest Organization be set up with a one-week drive, the funds collected to be distributed by the Committee in charge.

#### 6.—*Literary Association.*

On account of war restrictions, the annual Spring Play and the annual performance of the Philharmonic Society were dropped. Two successful evenings, however, were provided by the Year Plays under the direction of the Dramatic Society. The University Chorus under the direction of Mr. Gordon Clark, a second year Medical student, staged for two evenings one of the finest productions that has ever been presented in the University. Special mention should also be made of an excellent production, to three full houses in Convocation Hall, of Shakespeare's "Midsummer Night's Dream", under the direction of Miss Doris Sheppard.

The Students' Union received from the War Services Board special permission to put on a Talent Night. This took the form of a Varsity Show. The continuance

of such a type of performance is not to be recommended except under the direction of some competent person who possesses a proper understanding of and respect for university standards.

The Debating Society participated in the Western University Competition and won the McGoun Cup.

#### 7.—*Athletics.*

In spite of the demand on students' time by the War Services training on the Campus, many students took advantage of the various athletic activities offered by the Men's and Women's Athletic Associations. The Inter-year Competitions brought out many participants and much enthusiasm. A new element was also brought back into Athletics by the revival, on a limited scale, of W.C.I.A.U. competitions. The University of Alberta won the Western Inter-Collegiate Rugby and Men's Basketball championship. The Women's Basketball team lost to Saskatchewan by a small margin in two very closely contested matches. Plans are being made for a limited number of W.C.I.A.U. competitions for next session. The prospect of the appointment of a highly qualified Director of Physical Education who will assume responsibility for the direction of Athletics has added much enthusiasm to the plans for the future.

#### 8.—*Social Functions.*

Social functions have been restricted by the Students' Council for the duration of the war both in number and in the expense involved. In spite of this, however, the students have enjoyed a reasonably satisfactory social life. The social functions, in spite of the fact that many of them had to be provided for outside the University buildings, have been very well conducted, the students themselves assuming full responsibility in this regard.

#### 9.—*Medical Services.*

For the past two years the Medical Services have, in spite of the fact that we have had no epidemics, shown a small deficit. It has, accordingly, been found necessary to increase the fee from \$5.00 to \$6.00. The staff, under the direction of Dr. John Scott, with Dr. Kenneth Hamilton, Infirmary Physician, and Miss Revell, Infirmary Nurse, have carried on very satisfactorily during the session. It is recommended that a woman physician be added to the Medical Staff next session, and that certain time- and expense-saving equipment be purchased.

#### 10.—*Fraternities.*

In order to interfere as little as possible with the programme of the Freshman Introduction Committee which is rendering excellent services in welcoming new students to the University and helping them to get settled, rushing in the Fraternities was delayed till after this committee has completed its work. It is recommended that this policy be continued in the future.

#### 11.—*Discipline.*

There were no serious cases of discipline during the session.

#### 12.—*Remembrance Day.*

A Remembrance Day Service was held on November 11th, a certain amount of time being taken from the 10:00-11:00, 11:00-12:00 lecture periods to permit of a musical programme of suitable length. Mr. Nichols, University Organist, provided

a very appropriate programme of organ selections. The service was dedicated to the memory of students who had fallen in the World War II as well as in the World War I. It is recommended that this policy be continued, at least for the coming session.

### **Report of the Officer Commanding, Canadian Officers Training Corps, Lieutenant-Colonel P. S. Warren**

1. Since last reporting on the activities of the University of Alberta Contingent, Canadian Officers Training Corps, several changes regarding training have taken place largely through Directives from National Defence Headquarters. These will be discussed in the present report.

2. There have been several changes, both major and minor, in the personnel of the administrative and training staff of the Unit. Major G. M. Smith, who has been second-in-command of the unit, has resigned his Commission and relinquished his position on account of ill health. Major Francis Owen has been appointed second-in-command of the unit. Capt. W. C. Broadfoot, Officer Commanding C Company, has been appointed to that rank from Lieutenant after receiving his qualifications. Lieut. Colonel K. A. Hamilton has been attached to this unit as Medical Officer, vice Captain J. W. Scott, who has resigned his Commission. R. R. Buckley, Second Lieut., was appointed commander of A Company for the year. Other appointments remain as before. The members of the Staff of the University who are participating in the administration and training of the unit are as follows:

Officer Commanding .....	Lt.-Col. P. S. Warren
Second-in-Command .....	Major F. Owen
Junior Instructor .....	Major W. G. Hardy
Paymaster .....	Major A. West
Adjutant .....	Capt. C. R. Tracy
Quartermaster .....	Capt. A. Stewart
Medical Officer .....	Lt.-Col. (Capt.) K. A. Hamilton
O.C. B Company .....	Lieut. W. H. Johns
O.C. C Company .....	Capt. W. C. Broadfoot
Ass't Adjutant .....	Lieut. G. A. Elliott

3. The annual camp was held at Sarcee, April 30 to May 14, 1944. This was the best camp we have held. On account of the smaller number of students attending it was found possible to place them all in permanent huts with double deck cots and mattresses. The weather was also much kinder than usual and no time was lost through rain or snow.

The training carried out was largely battle drill and we were fortunate in obtaining two first-class instructors for this purpose. The boys hardened up quickly and enjoyed the work, even though very strenuous.

The firing on the range was of a high order. This was the result of a combination of more thorough preliminary training, good weather for the purpose, and a first-class range officer.

4. National Defence Headquarters called a meeting of the Officers Commanding of training units at Universities for the purpose of correlating all training being carried out by the different units across Canada. The meeting was called for the 8th of September, 1944, at Ottawa, and was attended by the Officer Commanding, C.O.T.C., and the Officer Commanding, U.A.S., as representatives of the

University of Alberta. This meeting accepted and recommended to the Universities Conference the following changes:

(1) The appointment of a Joint Services University Training Board at National Defence Headquarters for the purpose of correlating all University training and the appointment of a Joint Services University Training Committee at each University to supervise the training locally.

(2) After two years' satisfactory basic training, comprising 110 hours of Headquarters' training and two camp periods, senior students would be required to do 60 hours' Headquarters training a year and camp training.

These two recommendations were accepted by the Universities Conference.

As a result of these recommendations the Joint Service University Training Committee was appointed at the University.

President R. Newton .....	Chairman (as required by terms of reference)
Dean A. C. Rankin .....	} representing the University.
Dean R. S. L. Wilson .....	
Lt.-Col. P. S. Warren .....	} representing the training units.
Lt.-Col. A. W. Matthews .....	
Lt.-Col. D. G. L. Cunningham .....	H.Q., M.D. 13, representing the Army.
Lieut. R. R. Maguire .....	HMCS "Nonsuch" representing the Navy.

3. The strength of the unit when training commenced in October, 1944, was 400.

This strength was divided into a Headquarters and four companies as follows:

Headquarters—Administrative Staff .....	14
A Company.....Senior students in Specialist training divided as follows:	
D & M Course.....	24
First Aid and Stretcher Bearers.....	26
3" Mortars .....	8
Browning Machine Gun .....	18
Artillery .....	47
B Company.....2nd year Basic Training .....	70
C Company.....1st year Basic Training .....	124
D Company.....1st year Basic Training.....	90

B, C and D Companies trained three times a week on Mondays, Wednesdays and Fridays, A Company was divided, half training on Tuesday and half on Thursday. They also had extra parades especially near the day of Inspection.

6. Late in December, 1944, word was received from Headquarters R.C.A.F. that the training of the University Air Squadron would be discontinued and the Squadron disbanded. This action seemed a little peremptory as the University was not consulted about it. As it was necessary that the students in the U.A.S. should continue military training in order to complete 110 hours, the personnel of the U.A.S. was taken on the strength of the C.O.T.C. This raised the strength of the C.O.T.C. to 484. The U.A.S. personnel were left in one company, as their training would be different from that of the other companies. To do this our former C & D companies were coalesced into one company, C, and the U.A.S. personnel were designated "D" Company. The Company was placed under Command of Second Lieut. Nonnecke and the training was supervised by Major Owen. The work of this company was satisfactory though the training was complicated.

7. The results of the year's training were, on the whole, considered highly satisfactory. The inspection of the unit was held on March 24th and the District Officer Commanding, Brigadier Harvey, seemed pleased with our progress.

8. The Wartime Bureau of Technical Personnel visited the University on February 14th and 15th to make a selection of our graduating Science students as Officer Candidates for technical appointments. Fifteen candidates were chosen for such appointments. Choice was also made of third year Science students to start their specialist training during the summer; 13 were chosen for this purpose. Selection was also made, mostly from the Science students, of suitable personnel for the Officers' School of the Canadian Infantry Corps. Nineteen were finally chosen and accepted. This will materially increase the number of personnel of this unit who are on active service. The number is now about 1,200, with nearly 600 holding Commissions.

9. The work of training and administration of the unit is becoming increasingly arduous. Basic training alone covers more ground than formerly and the standard for such training is continually rising. The specialist training of the senior students is an interesting part of our work but involves much careful planning and administration with much added equipment. The work of the Adjutant and Quartermaster is augmented by the continued increase of administrative detail resulting from greater complication in the organization of the Canadian Army. This reflects on most of the administrative officers of the unit.

The liaison between the University and National Selective Service Mobilization Section, is becoming increasingly arduous as the unit, through the Commanding Officer, has been asked to handle all deferments. The Commanding Officer of the unit has found it necessary to visit the Mobilization Section on an average of twice a week during the term to keep the liaison working smoothly.

The work of Major Owen, who acts as Intelligence Officer for the unit, has steadily increased as confidential reports must be submitted for all former members of the unit who receive promotion as officers. This has entailed many hours of difficult work during the term. Major Owen also took on the responsibility of training the women students of the W.W.S. This was not a small task and was well done.

### **Report of the Officer Commanding, University Air Squadron, Squadron Leader R. M. Hardy**

During the summer of 1944 a general reduction in the British Commonwealth Air Training Plan was made, and enlistments in the R.C.A.F. were practically discontinued. As a result there was considerable doubt during the summer as to whether the R.C.A.F. would continue the University Air Squadron program in the universities and colleges.

A conference was held in Ottawa in September, 1944, at which a reorganized plan of administration of the Service training at the Universities was discussed by representatives of the Services and the executive committee of the Universities' Conference. The writer attended these meetings as representative of the University Air Squadron Units in the No. 4 Training Command, R.C.A.F. Incidental to the main meetings, the R.C.A.F. held two meetings at which the future policy regarding the University Air Squadron was discussed. The one definite statement made by the R.C.A.F. at these meetings was that it had been decided to continue the Univer-



sity Air Squadron as a peace-time policy. On this as a basis we were instructed to recruit at the opening of the University session, but on the understanding that the R.C.A.F. was making no commitment to accept U.A.S. trainees for Active Service. We were also authorized to continue training U.A.S. airmen who had completed one or two sessions in the Unit.

In accordance with above policy we signed up 20 new men in the No. 8 U.A.S. in October. The unit commenced training with 99 airmen on strength. In view of the fact that the trainees were not being permitted to transfer to Active Service in the R.C.A.F., the training time was reduced from six hours per week to four hours per week for the first and second year trainees. Inasmuch as we were not provided with a training syllabus for the airmen having completed two sessions of training, we were forced to simply improvise with physical training for a total of 24 hours from October to December.

On December 28, 1944, instructions were received from Air Force Headquarters to disband the Unit, effective 31st December, 1944. The unit therefore officially ceased to operate on that date. The reason given for discontinuing the training was that it was "in line with the general reduction of the British Commonwealth Air Training plan."

All officers and airmen of the No. 8 University Air Squadron were accordingly discharged, effective 31st December, 1944. The airmen were taken on strength of the C.O.T.C. in January, 1945, to enable them to complete the requirements regarding Service training for university students.

No protest was made to R.C.A.F. Headquarters on the matter of discontinuing the training in mid-session. It was considered that the existing arrangement of carrying on Air Crew training with no opportunity for the trainees securing appointments in the R.C.A.F. was most unsatisfactory. In the opinion of the Unit officers it was better to discontinue the Unit than to attempt to carry on without a clear-cut policy.

It is submitted, however, that an arrangement permitting the R.C.A.F. to cancel their program on such short notice is not in the best interests of the University. A change as effected at mid-session this year is distinctly bad for student morale. In fact, the efficient operation of the unit during the two and one-half sessions of its life was continually handicapped by changes in R.C.A.F. policy in regard to transfer to Active Service and details of training. Many of these changes were due to exigencies of the war situation. However, the reversal in policy between September and December, 1944, regarding the peace-time policy cannot be so explained. Another source of difficulty was the fact that in all the preliminary discussion regarding the organization of the U.A.S., the R.C.A.F. stated that technical appointments in the Air Force would be made from U.A.S. trainees. In point of fact not one technical appointment in the R.C.A.F. was made to trainees in the University Air Squadron at this University. It is considered that under peace-time conditions the integrity of the administrative officers of the Unit would be in complete jeopardy in the eyes of the students if policy changes were as frequent as occurred during the life of the Unit.

If an R.C.A.F. training program is resumed under peace-time conditions at this University it is recommended that the agreement with the R.C.A.F. include provisions,

(a) to prevent the cancelling of the training program during the regular academic session;



(b) to insure that technical appointments in the R.C.A.F. will be available to trainees in the unit.

It is the opinion of the writer that a properly organized training program would be quite attractive to a large group of students in peace-time. If it provides opportunity for flying training and the possibility of appointment in the permanent Air Force it could be quite successful and it would be in the interests of the University to foster a unit so organized.

Despite the above mentioned administrative difficulties it is considered that the University and all personnel connected with the Unit have every reason to be proud of the record of the No. 8 University Air Squadron during the two and a half years of its life. A high standard of training was maintained. A comparatively large percentage of the total strength transferred to Active Service in the R.C.A.F. These men have now seen service in many parts of the world. They have, without exception, been a credit to this University and the Unit.

The final report would be incomplete without mention of the contributions made to the work of the Unit by Dr. H. R. Thornton and Prof. F. M. Salter, who served as officers in the Unit. They carried a heavy load of instruction, assumed considerable responsibility at the periods of the spring camps, and, in fact, were quite indispensable from the point of view of efficiently operating the Unit.

#### **Report of the Officer Commanding, University Naval Training Division, Lieutenant Commander A. W. Matthews**

There was a gratifying increase in student interest in the U.N.T.D. during 1944-45 with the result that a New Entry Class of 78 ratings was obtained. This class was divided, approximately equally into "Nelson" and "Drake" divisions. Upon instructions from the Commanding Officer of Naval Divisions each new entry was warned before attestation that, due to the present state of the war, there could be no guarantee that he would be taken on Active Service at any subsequent time.

The total strength of the U.N.T.D. at the start of the session was 109. This was reduced to 104 during the second term as a result of the calling for Active Service of four ratings who failed to obtain the minimum class standing in their Christmas examinations, and of one additional rating who volunteered before the end of the session.

Lieut. R. W. McGuire was appointed by the Area Commanding Officer to act as U.N.T.D. Divisional Officer and discharged his duties in a capable and efficient manner. The revised syllabus for first year training was comprised of a total of 36 hours of "New Entry Training"; 53 hours instruction on "The Navy"; and 21 hours "Upper Deck Signals". The syllabus for the second year called for 51 hours of "New Entry Training (including Signals)"; 30 hours on "The Naval Service", "Types of Ships", etc.; and 29 hours on "Pilotage and Navigation". Some difficulty was experienced in integrating senior students, on a 60 hour basis, into the training programme. This was due to a considerable extent to the fact that instructors are provided by H.M.C.S. Nonsuch and the work for a given day must sometimes be changed on short notice. On several occasions during the year the Divisions were taken on board H.M.C.S. Nonsuch for Saturday afternoon training. The co-operation received at all times from the Commanding Officer and his staff of officers and instructors was of the highest order.

Following the interviews with the Technical Officer Selection Boards, two ratings, who served at sea during the summer of 1944 as Acting E.A. 4th Class, were promoted to Prob. Elect. Sub/Lieut. and are being drafted to Active Service at the close of the session. Three other naval ratings were selected by the Army Board for technical Infantry appointments. Four graduating students are being called to Active Service at the close of the session. In addition nine ratings in the junior years have volunteered for Active Service and will be drafted for duty at the close of the session.

All other ratings in the Divisions have been instructed to report at H.M.C.S. Nonsuch on May 1, for Full-Time Spring Training. They will be drafted to H.M.C.S. Naden, Victoria, B.C., for arrival on May 5, for two weeks' training at the coast establishment. Several ratings have volunteered for Full-Time Summer Training and will remain on the coast at the conclusion of Spring Training.

In conclusion, I wish to express appreciation for the co-operation received at all times from Lieut.-Col. P. S. Warren, Commanding Officer of the C.O.T.C.

### **Report of the Director of Women's War Services, Professor Mabel Patrick**

This year there were two changes in the Women's War Services Program.

The inclusion of sports for senior students last year proved most successful. At the request of the Executive of the Women's Athletic Association games were substituted for one hour of drill per week for first year students. The only difficulty in carrying out this program arose from the limited facilities available. These proved inadequate for the larger number of students.

Thirty-five students registered for the course in Group Leadership arranged by Miss Hazeldine Bishop of the Council of Social Agencies. These students acted as leaders for Girl Guide Companies, Canadian-Girls-in-Training Groups, and Y.W.C.A. Clubs. Leaders of these organizations in the city have commended the work of the students and expressed the hope that provision for leadership training might be made for next year. Sixteen students took the course in Social Service.

St. John Ambulance classes in First Aid and Home Nursing were carried on under the direction of Miss McCulla and Mrs. Pearson of the Department of Nursing.

In addition to participation games, physical education classes, and parades, which were designed to improve the physical fitness of the women students, and the courses mentioned above, services were contributed as follows: Assistance at the University War Services Canteen, the Salvation Army Canteen and Hostel, the Allied Services Centre, the American Red Cross Snack Bar, the Magazine Depot (under the direction of the council of Jewish Women), the distribution of rations cards, the University Hospital, the Cafeteria, knitting for the Students' Union Christmas parcel, the Red Cross, clerical work.

I would like to express my deep appreciation of the assistance and co-operation given by Lieut.-Col. Warren and all those who helped in carrying out the program for this year.

### **Report of the Director of the Summer Session, Dr. H. E. Smith**

The first session of the integrated Summer School opened on July 17th with a registration of 1,062 students, of whom 962 were registered in the Faculty of Education, and 100 in the Faculty of Arts and Science.

### *Distribution of Students.*

Of the number registered in the Faculty of Arts and Science, a classification may be made as follows: candidates for the B.A. degree, 39; B.Sc., 37; B.Sc., for Dentistry, 1; B.Sc. for Nursing, 2; combined B.A., B.Ed., 4; combined B.Sc., B.Ed., 6; combined B.Com., B.Ed., 2. There were 4 special students, 2 special graduate students, and 3 in candidacy for the M.A. degree.

Any meaningful classification of the students registered in the Faculty of Education is difficult to make. The registration forms of approximately 360 students read, "degree sought—B.Educ." It is certain, however, that some of these had no clear conception of what was involved; a considerable number were interested primarily in completing certification requirements, and only secondarily in degree credits; and obversely, a substantial number of applicants for admission were registered "for certification only" because at the moment information was not at hand from which to establish a clear-cut status. At a guess one might anticipate that from one-half to two-thirds will proceed at least part of the distance on the road to a degree.

### *The Summer School Faculty.*

The Faculty consisted of 60 full-time instructors, assisted by a staff of laboratory personnel and readers. The services of the University library staffs were supplemented by the appointment to the Garneau Normal School library of two full-time and two part-time librarians. The enthusiasm and unfailing spirit of co-operation of every member of the staff was a source of constant satisfaction to the Director. To this should be added an expression of generous gratitude to the University clerical staffs who for several months preceding and again throughout the Summer Session term carried a heavy burden of work cheerfully and efficiently.

### *Guest Lecturers.*

Two guest lecturers from outside the Provincial educational system added appreciably to the attractiveness of the Summer School offerings. These were Dr. Esther Prevey, from Kansas City, Missouri, who for a second year offered an advanced course in Child Psychology; and Dr. Glen Shortliffe, of the faculty of Queen's University, who offered a senior course in French. Of other extra-University instructors, a number were secured from the teaching and administrative staffs of the Provincial Department of Education, while several were drawn from city and Divisional staffs. From the evidence at hand it appears that instruction throughout the Summer School was uniformly efficient and inspiring.

Observing, however, the strong financial position of the Summer School in its new form, it is suggested that the policy of inviting outstanding lecturers from abroad might well be more generously applied in future years.

### *Pre-Registration.*

In accordance with University Summer School policy, students were expected to register well in advance of the opening of the session, the date, May 13th, being set in the Bulletin as the deadline for the acceptance of applications. Actually, however, applications were accepted as late as July 16th, and the Faculty of Education even admitted a few late registrants on the opening day of the session. This departure from policy was thought to be justified on the several grounds that the Bulletin was late in distribution, the majority of applicants were not aware of their obligation to register early, and certain commitments had been made to the Depart-

ment of Education to meet the certification requirements imposed upon several classes of teachers.

Under these circumstances, with pre-study obligations very imperfectly met by a considerable proportion of the student body, especially of that registered in the Faculty of Education, concern was felt that a strict adherence to the examination rules would result either in the acceptance of undesirable standards of scholarship or in a high percentage of failure. Accordingly it was decided to suspend the rules with regard to the writing of final examinations at the end of the session, and to "invite" students in the Faculty of Education to postpone finals until July, 1945.

#### *Final Examinations.*

In point of fact, however, only 45 students in Education elected to postpone their finals. Of the students in Arts and Science (who were not included in the above mentioned "invitation") only three applied for and were granted postponement.

It is anticipated that in the 1945 session it will be unnecessary to make concessions in respect either to timely registration or to final examination dates, provided the Summer School offerings are publicized early and widely. Exceptional cases will inevitably present themselves, but these will have to be dealt with individually, each on its own merits.

#### *Accommodation.*

The securing of housing accommodation appears to have constituted much less of a problem than was anticipated. With some assistance from the Bursar's office the students found places speedily and with little trouble. How adequate and satisfactory the accommodation was is not known but no complaints were heard. It is hoped, however, that the University residences will be available for occupancy by July, 1945. It is generally agreed that a good part of the value to be derived from a brief University term lies in community living. Not only is it good in itself, as affording opportunity for exchange of ideas, stimulation to thinking, and development of social relationships, but it facilitates the arrangement of extra-curricular activities on a broad and generous scale.

#### *Extra-Curricular Activities.*

(a) Public Lectures and Musical Events. The only public lecture offered was that by Dr. Glen Shortliffe, his topic being "France and the New Europe". The lecture was fairly well attended and was evidently much appreciated and enjoyed. The student attendance was meagre, a fact which suggests that corresponding lectures planned for another year should be of a more popular nature, or alternatively that a more wide-spread appeal be made to the over-town public.

One evening of music was organized by the Students' Council and this proved to be most attractive and enjoyable. It is hoped that more events of this type may be arranged during the 1945 session, and in this connection the possibility of organizing a choral group or choral groups is being considered.

(b) Dances. Nine dance evenings were arranged by the committee on social affairs. The dances were well organized and were uniformly well attended. The advisers to men and women students report that the arrangements for admitting visitors were simple and effective.

While it seems that the principle of charging faculty members a union fee if they wish to attend social functions is a good one, it will be recommended to the 1945



Executive that faculty members be provided early in the term with a statement of events being arranged, together with an invitation to attend as they find it convenient.

(c) Informal teas. Teas were not held as during the two previous sessions because of the inadequacy of facilities at Garneau School. The Adviser to Women Students feels that if at all feasible the practice should be resumed in the 1945 session. It is thought to serve a very useful purpose. A "mixer" tea for faculty and students was held rather late in the term. It should have been held earlier.

(d) Athletics. Most of the students found their program too heavy to allow them to take much part in sports. Evening events were difficult to arrange because many of the students lived over-town. Nevertheless men's baseball was carried on with four teams participating, basketball and softball teams were organized for the women, and considerable numbers of both men and women took advantage of the swimming and roller skating facilities. An athletic display drew a good crowd and was much appreciated.

#### *Medical Services.*

Medical Services were available as usual with Dr. Heber Jamieson acting as Medical Officer and Miss Revell as nurse in charge of the Infirmary. Fortunately there were few applicants for admission to the Infirmary, and the increased student fee of one dollar for medical services has left in the fund a substantial credit balance of approximately \$800.00.

Dr. Jamieson examined all students enrolled in physical training classes, recommending the withdrawal of one student who was found to have a mild heart condition. This practice is thought to be highly important and should be continued.

Considerable uncertainty appears to prevail with respect to the status of the medical services of the Summer School, particularly in terms of the location of final responsibility in case of excessive demands upon the fund. It is suggested that this matter be referred to the proper University authorities for clarification. Possibly the Board of Governors might be disposed to assume responsibility for the integrity of the fund, vesting administrative authority in a committee composed of three members of the Students' Council, three members from the University staff, with the Director of the Summer School acting as chairman.

#### *The Students' Council.*

The most cordial relations existed throughout the session among the members of the Students' Executive, the Advisers, and the Director. Informal joint meetings were held each week in the course of which matters of mutual concern were discussed freely. The Director feels that the student body received excellent service at the hands of its Executive members and of the Advisers.

#### *Quality of Work.*

The frequently expressed opinion of individual instructors leaves one with the impression that the student body as a whole accepted the challenge of University standards and worked faithfully and well. The incidence of failure on examinations was not appreciably higher than that ordinarily found in University courses, and it is believed that standards were honestly maintained. Provided registrations for the 1945 session can be secured early in the year there appears to be no ground for concern that University standards will be compromised by the new type of registrant.

### *Inequalities in Teaching Load.*

At least two factors operated to produce marked inequalities in class enrolment, viz., uncertainty as to the likely magnitude of total registration, and complications within the timetable itself. The course in Enterprise Education, Educ. 204-304, which enrolled some 360 students, comprised a lecture hour from 11 to 12 a.m. as well as a laboratory period extending over most of the afternoon. Thus a second course for each of the students registered in this course had of necessity to fall in the 8-10 a.m. period. As a consequence the early morning classes ranged in enrolment from 100 to 190 students, while some of the classes in the later periods enrolled relatively small numbers. Obviously the unexpectedly large total registration would in any case have expanded some of the classes unduly.

An early distribution of the 1945 Summer Session offerings may necessitate publication before the teaching staff can be completely arranged for. This may prove advantageous in so far as the appointment list may be filled more closely in harmony with the trends in registration. It seems undesirable to have class loads disproportionate to the extent of ten to one. Some revision of the administrative arrangements for enterprise education appears to be necessary.

### *In Conclusion.*

The Director wishes to add that he found the work of the Summer Session most enjoyable and stimulating, and appreciated keenly the expressions of the President's strong interest and support.

## **Report of the Director of the Department of Extension, Mr. Donald Cameron**

### **STASTICAL SURVEY**

#### *Lectures.*

##### **Number of lectures:**

University teaching staff .....	311	
Attendance .....	28,361	
Department of Extension staff .....	167	
Attendance .....	16,494	
Aggregate attendance .....		44,855
Number of radio talks .....	216	

#### *Conferences and Short Courses.*

University Week for Farm Young People .....	196
Refresher Course in Municipal Administration .....	67
University Short Course and Co-operative Conference.....	245
Refresher Course in Soil Mechanics and Concrete .....	184
Refresher Course in Sanitary Inspection.....	20
Prospectors' Course.....	21
Short Course in Visual Instruction.....	28
Refresher Course in Medicine.....	180
Refresher Course in Pharmacy.....	90
<b>Community Life Conferences:</b>	
Lake Saskatoon .....	107
Sangudo .....	133
Park Lake.....	175
Gooseberry Lake.....	289



Banff School of Fine Arts.....	366	
Writers' Conference.....	16	
Edmonton Short Course in Art .....	44	
Lethbridge Community Art School.....	15	
University Art Class (three sessions).....	63	
University Weaving Class (three sessions) .....	36	
Aggregate attendance .....		2,275
<i>Visual Instruction.</i>		
Number of times lanterns loaned.....	39	
Filmslide and miniature projectors loaned.....	28	
Sets of lantern slides sent out.....	401	
Number of times slides used.....	528	
Aggregate attendance lantern lectures.....		30,300
Filmslides sent out.....	930	
Times filmslides used.....	1,465	
Aggregate attendance, filmslides.....		54,550
Sets of moving picture films sent out.....	2,559	
Number of reels in sets sent out.....	10,866	
Number of showings given.....	4,882	
Aggregate attendance, moving pictures.....		603,259
National Film Board showings.....	2,439	
Aggregate attendance, rural circuits.....		310,558
		<hr/>
Total attendance, V.I. ....		998,667
<i>Canadian Legion Educational Services.</i>		
Registration in conducted classes.....	3,191	
Registration in correspondence courses.....	3,538	
Registration in directed reading courses.....	403	
		<hr/>
		7,132
<i>Library and Debating Service.</i>		
Number of Regular Libraries circulated.....	90	
Number of times sent out.....	142	
Number of Special Libraries sent out.....	61	
Travelling Library circulation:		
Regular .....	9,789	
Special .....	3,447	
		<hr/>
		13,236
Number of small parcels of reference books, pamphlets, magazines and pictures sent out.....		328
Open Shelf circulation:		
Books .....	25,052	
Pamphlets and clippings.....	1,335	
Periodicals .....	1,965	
		<hr/>
		28,352
Books to Service personnel:		
C.L.E.S. Library.....	947	
Extension Library.....	1,328	
		<hr/>
		2,275

Books and magazines sent to Banff School of Fine Arts.....	652
Number of adult single plays sent out.....	1,368
Number of adult collections sent out.....	163
Number of juvenile single plays sent out.....	126
Number of juvenile collections sent out.....	186
	<hr/>
Number of package libraries for debaters sent out.....	1,843
	194
<i>Study Group Material.</i>	
Number of sets of Citizens' Forum bulletins sent out.....	325
Number of sets of other study group courses sent out.....	118
	<hr/>
	443
<i>New Canadian Plays.</i>	
Number of copies of New Canadian Plays sold .....	900
<i>Publications.</i>	
Press Bulletin circulation (one issue).....	5,500
Agricultural publications:	
Bulletins sent out during the year .....	16,845
Mimeographed circulars sent out during the year (estimate) .....	1,000
	<hr/>
	17,845
Total number of bulletins distributed since inception of service .....	368,292
University News Letter:	
Number of issues .....	8
Circulation .....	1,504
Stage Door:	
Number of issues .....	9
Circulation .....	4,500
Alberta Folklore Quarterly (one issue).....	1,500
	<hr/>
<i>Recapitulation.</i>	
Total aggregate attendance at lectures, lantern slide lectures, film-slide programmes, moving pictures, National Film Board showings, conferences and short courses, Canadian Legion Educational conducted classes and correspondence courses.....	1,052,929
Total circulation of books, travelling libraries, package libraries, plays, periodicals, study group courses, New Canadian plays .....	48,223
Total circulation of Press Bulletin, Agricultural Publications, News Letter, Stage Door, Alberta Folklore Quarterly.....	30,849

### *Conclusion.*

During the five and one-half years of war, there has been an increasing appreciation of the importance of adult education in promoting a maximum war effort. Use has been made of the methods and techniques of adult education to a degree never before experienced. Radio, pamphlets, educational films, lectures, schools and short courses have all played a part in bringing about better understanding of the issues involved.

Today as we approach the difficult tasks of reconstruction and the building of a stable, prosperous and peaceful society, the need for adult education is greater

than ever. These tasks will challenge the resources of our universities to an even greater degree than the tasks of war.

If we are to succeed in attaining our objectives, universities must play a major role, and they can do this through an effective programme of extension work organized in co-operation with the people's own community organizations.

### **Report of the Director of the Provincial Laboratory of Public Health, Dr. A. C. Rankin, For the Year 1944.**

By reducing the minimum charge with respect to urinalysis, Wasserman tests, Kahn tests, abortus examinations, tularensis tests and stock vaccines, the commercial value of the work, carried out during the year is \$196,195.00 as compared to \$375,522.00 in 1943. The number of examinations made is, however, 121,147 as compared to 115,013 in 1943, an increase of 6,306.

During the year, Dr. J. A. Romeyn, Assistant Bacteriologist, joined the Royal Canadian Army Medical Corps. Since his departure in June, there has been no replacement, a situation which may call for temporary adjustment later on, as Dr. Romeyn has volunteered for the Pacific War and his absence is likely to be extended considerably if he should be sent there.

The usual number of epidemiological investigations have been undertaken, in one of which a case of anthrax was discovered which was subsequently cured with penicillin, constituting an early successful application of that drug to such an infection in medical practice in Canada.

The investigation of the cheese-borne epidemic of typhoid fever referred to in last year's report has lead to the adoption of regulations under The Public Health Act whereby the sale of cheese in the province is not permitted within three months of its manufacture and we understand to similar precautions in the other provinces.

There has been an increase in certain examinations with regard to venereal disease control (6,770) which has necessitated the employment of additional technical assistance and the opening of a small subsidiary laboratory in the Provincial Clinic where culture work is being carried out. This will be, it is anticipated, of considerable importance in the determination of carriers of infection and in the control of the incidence of disease in the province.

The equipping of additional space for the purpose of carrying out serological diagnostic examinations, in all 71,371, has been a convenience and has contributed to some reduction in the congestion in the Bacteriological Department. The Department of Pathology, unfortunately, is still considerably hampered by the urgent need for suitable physical accommodation.

The usual difficulties regarding technical staff as a result of war conditions has again been encountered and overcome. Some increase in the scale of pay was found to be necessary and will no doubt be permanent.

Under the Department of Health and Welfare a committee has been set up consisting of the Directors of the various Public Health Laboratories, Provincial and Federal, for the purpose of co-ordinating the work and standardizing the methods employed in Provincial Laboratories. Dr. R. M. Shaw was in attendance at the first meeting of this important committee.

In conclusion it is a pleasure to record the very satisfactory and cheerful support which has been at all times given by the staff.

**Table XI.—Commercial Value of Work if Minimum Charge  
were Made 1944**

Sputum .....	649	\$ 1.00	\$ 649.00
Diphtheria and Haemolytic Streptococci.....	4,410	1.00	4,410.00
Typhoid Fever .....	669	1.00	669.00
Milks .....	1,013	3.00	3,039.00
Waters .....	2,983	10.00	29,830.00
Miscellaneous Examinations .....	7,617	3.00	22,851.00
Mother's Milk .....		2.00	
Urinalysis .....	56	1.00	56.00
Medico-Legal Examinations .....	9	5.00	45.00
Cerebro Spinal Fluids for Wassermann Test .....	2,620	1.00	2,620.00
Bloods for Wassermann Test .....	7,981	1.00	7,981.00
Bloods for Standard Kahn Test .....	7,897	1.00	7,897.00
Bloods for Presumptive Kahn Test .....	52,873	1.00	52,873.00
Smears for the Gonococcus.....	17,386	1.00	17,386.00
Van Den Bergh Determination .....	1,705	1.00	1,705.00
Pathological Histological Material .....	6,853	5.00	34,265.00
Blood Smear Examinations .....	154	2.00	308.00
Ascheim Zondek Test .....	368	5.00	1,840.00
Comparative Series .....	5	3.00	15.00
Cerebro Spinal Fluid Examinations (Col- oidal Gold, Pandey) .....	2,691	2.00	5,382.00
Bacteriological Examinations (P.M.) .....	52	5.00	260.00
Post Mortem Examinations (Bact.) .....	235	5.00	1,175.00
B. Abortus Examinations .....	639	.50	319.50
B. Tularensis Examinations .....	638	.50	319.00
Typhoid Vaccine (10 c.c. quantity) .....		.25	
Autogenous Vaccine (25 c.c. quantity) .....	21	5.00	105.00
Poliomyelitis Serum (20 c.c. quantity) .....		2.50	
Stock Vaccine (25 c.c. quantity) .....	9	3.50	31.50
Cattle Blood Examinations .....	1,644	.10	164.50
<b>Total.....</b>			<b>\$196,195.40</b>

### **Report of the Director of the Industrial Laboratories, Mr. James A. Kelso**

During the year 4,343 examinations or analyses of some 170 substances, including 14 different materials of construction, were carried out.

As usual, the necessary court evidence and consultations were given in cases under Dominion and Provincial acts as required by the R.C.M.P. and government departments. Investigations were carried out for such departments as Attorney General, Trade and Industry, Provincial Secretary, Veterinary Laboratory, Alberta Liquor Control Board, etc.

Various war services required a considerable number of analyses and examinations.

Engineering materials were handled in conjunction with Departments of Civil and Electrical Engineering.

The usual control analyses were run for University Power Plant.

Considerable research work was carried out on methods of analyses.





REPORT  
OF  
THE GOVERNORS  
OF THE  
UNIVERSITY OF ALBERTA  
1945-46





*To the Lieutenant Governor in Council*

Sir:

On behalf of the Governors of the University of Alberta, and in accordance with section 28 of an Act respecting the University of Alberta, the undersigned have the honour to transmit through the Minister of Education the Report of the University of Alberta, setting forth the revenues and expenditures for the year ending March 31st, 1946, and the investments as they stood at the end of the fiscal year.

Appended to this report is the Report of the President of the University, in which the academic work of the University for the year, July 1st, 1945, to June 30th, 1946, is dealt with in detail.

ROBERT NEWTON, *President*

H. H. PARLEE, *Chairman*

November 30, 1946



# *Financial Statement*

## UNIVERSITY OF ALBERTA BALANCE SHEET AS AT MARCH 31, 1946

### ASSETS

#### FIXED:

##### Buildings and equipment in service:

Land, buildings and plant, Schedule No. 1 .....	\$4,201,581.37
Furnishings and equipment, Schedule No. 2 .....	993,257.25

\$5,194,838.62

#### CURRENT:

Cash on hand and in bank .....	\$ 69,815.32
Accounts and fees receivable .....	\$361,669.28
Less: Reserve for doubtful accounts ....	2,500.00

359,169.28

Accrued interest .....	5,908.33
Merchandise held for re-sale, Schedule No. 4 .....	41,739.15
Dominion of Canada debentures .....	10,000.00

486,632.08

#### PREPAID EXPENSES:

Supplies and equipment on hand, Schedule No. 4 ..	\$ 23,863.55
Unexpired insurance .....	1,338.25

25,201.80

#### OTHER ASSETS:

Livestock inventory .....	\$ 21,851.50
Deposit, Workmen's Compensation Board .....	8,564.00

30,415.50

#### TRUST:

	Par value	Book value
Investments: Schedule No. 5:		
Dominion of Canada debentures ..	\$ 378,900.00	\$ 385,883.27
Province of Alberta debentures ....	665,600.00	665,600.00
Other bonds and shares .....	9,686.67	9,686.67

\$1,054,186.67      \$1,061,169.94

Cash on hand and in bank .....	198,113.54
Bond interest receivable, deferred .....	123,958.75
Mortgages receivable .....	13,838.06
Loans receivable .....	1,481.48
Real estate and shares, nominal value .....	15.00

1,398,576.77

\$7,135,664.77

# LIABILITIES

## CAPITAL AND SURPLUS:

Advanced by the Government of the Province of Alberta .....	\$5,154,813.47	
Capital surplus .....	120,221.86	
		\$5,275,035.33

## CURRENT:

Imperial Bank of Canada loan .....	\$ 18,000.00	
Treasury Branch, overdraft .....	1,100.00	
Accounts payable .....	156,763.09	
		175,863.09

## DEFERRED INCOME:

Fees and supplementary grant .....	\$ 73,211.83	
Cafeteria tickets .....	722.35	
		73,934.18

## RESERVES:

Staff suites .....	\$ 100,000.00	
Unexpended library fees and donations .....	20,094.15	
Premium on Rockefeller endowment .....	18,221.66	
Operating .....	16,801.85	
Rink repairs .....	11,977.66	
Workmen's Compensation Board .....	10,689.34	
Blood plasma unit .....	10,000.00	
Organ repairs and extension .....	10,000.00	
Repairs and replacements .....	8,360.16	
Preliminary building expense, architect .....	3,085.58	
Agricultural research .....	3,025.00	
		212,255.40

## TRUST:

General endowment, Rockefeller Foundation .....	\$ 500,000.00	
Scholarships:		
Escheated estates .....	\$245,714.29	
General .....	157,580.30	
		403,294.59
Research .....	264,975.68	
Pensions and superannuation .....	56,120.97	
Student grants and loans .....	23,283.92	
General educational purposes .....	18,113.85	
Sundry .....	37,877.09	
Accounts administered or held for affiliated organizations and others .....	90,326.50	
Accounts payable .....	4,584.17	
		1,398,576.77
		\$7,135,664.77
		=====

Edmonton, Alberta, August 31, 1946.

I have audited the books and records of the University of Alberta for the year ended March 31, 1946.

Operations for the year under review resulted in an excess of revenue over expenditure of \$64,345.21 as compared with an excess of revenue over expenditure of \$8,047.79 for the previous fiscal year.

The normal schools at Calgary and Edmonton and the summer school formerly under the jurisdiction of the Department of Education of the Province were transferred to the University as from April 1, 1945. All expenditures in connection therewith are shown on the attached statements except for maintenance and upkeep of buildings which has been provided by the Province direct.

Under the terms of the Province of Alberta's debt reorganization programme unmatured debentures having a par value of \$500,000.00, representing the investment of the Rockefeller Foundation endowment, were exchanged for new debentures in the same principal amount. In addition the University received \$201,350.00 in cash and special adjustment coupons which amount was carried to surplus and appropriated as a capital fund for medical research. The earnings therefrom together with earnings in excess of 2½% on the original endowment are to be used for medical research purposes.

The balance of the reserve for wartime adjustments, \$50,451.87, was transferred to surplus and together with the excess of revenue over expenditure for the year was appropriated to provide for construction of faculty suites, organ repairs and extension, completion of agricultural research projects and operating reserve.

Buildings, plant, furnishings and equipment are stated on the Balance Sheet at original cost. No provision has been made for depreciation but University officials are of the opinion that the value of furnishings and equipment has been maintained by additions and renewals from revenue.

Accounts receivable include an amount of \$290,605.58 due from the Department of Veterans' Affairs.

Inventories of merchandise for re-sale and supplies on hand are certified as to quantities and prices by officials of the University.

Trust investments in Province of Alberta matured debentures were redeemed and unmatured debentures exchanged for new securities of a like principal amount under the terms of the Province's debt reorganization programme. All adjustments received under the programme were carried to the respective trust accounts.

Past due principal on mortgages receivable amounted to \$2,500.00 as at the date of the Balance Sheet.

Capital and surplus transactions during the year are summarized hereunder:

Capital advanced by the Government of the Province of Alberta:

Balance at April 1, 1945 .....	\$5,060,535.11	
Add:		
Advance for capital assets .....	11,400.00	
Power plant extension .....	31,000.00	
Advance for repairs to residences .....	40,000.00	
Implementation of guarantee .....	3,000.00	
Advance for purchase of land .....	12,865.53	
Deduct:		
Gasoline testing laboratory equipment transferred to Research Council of Alberta .....	3,987.17	
Balance at March 31, 1946 .....		\$5,154,813.47
Capital surplus:		
Balance at April 1, 1945 .....	\$ 75,062.78	
Add:		
Covered rink donated by Students' Union .....	22,100.00	
Income contributions:		
Library .....	6,758.32	
General .....	16,300.76	
Balance at March 31, 1946 .....		120,221.86
		<u>\$5,275,035.33</u>

Subject to the foregoing remarks, I certify that, in my opinion, the above Balance Sheet is properly drawn up so as to show the true financial position of the University of Alberta as at March 31, 1946, according to information and explanations given to me and as shown by the books of the University, and the accompanying Statement of Revenue and Expenditure correctly sets forth the result of operations for the year ended at that date.

C. K. HUCKVALE, C.A.  
Provincial Auditor



UNIVERSITY OF ALBERTA  
STATEMENT OF REVENUE AND EXPENDITURE  
FOR THE YEAR ENDED MARCH 31, 1946

REVENUE

Grants:			
Province of Alberta:			
General .....	\$	746,000.00	
Debt charges, see contra .....		126,808.41	
			\$ 872,808.41
Dominion of Canada:			
Department of Veterans' Affairs, supplementary grant re rehabilitation students ..	\$152,304.34		
Department of Labour for accelerated courses .....	15,000.00		
			167,304.34
			\$1,040,112.75
Fees, net revenue: Schedule No. 7:			
General .....	\$	378,458.56	
Summer school .....		13,221.78	
Examinations .....		6,439.91	
			398,120.25
Interest on Rockefeller Foundation endowment .....	\$	16,665.83	
Deduct:			
Transferred to medical research trust .....		4,165.83	
			12,500.00
Library fees, see contra .....			15,568.28
			\$1,466,301.28

EXPENDITURE

Instructional expense:			
Instructional salaries and direct expenses, net,			
Schedule No. 8 .....	\$	842,429.95	
Maintenance of buildings, Schedule No. 9 .....		141,871.96	
Administrative salaries and expenses, Schedule No. 10 .....		65,511.57	
Library salaries and expenses, Schedule No. 11 .....		22,738.73	
Upkeep of grounds, Schedule No. 12 .....		19,292.99	
Provision for library accessions, see contra .....		15,568.28	
Calendars and scientific publications, Schedule No. 13 .....		6,957.63	
Pensions, arrears, Schedule No. 14 .....		6,156.77	
Rehabilitation office, Schedule No. 15 .....		5,115.56	
Provost's office, Schedule No. 16 .....		2,222.24	
Sundry, Schedule No. 17 .....		824.98	
			\$1,128,690.66
Operating departments net expenditure, Schedule			
No. 18 .....			48,924.59
Public service departments net expenditure, Schedule			
No. 19 .....			97,532.41
Debt charges, see contra .....			126,808.41
			\$1,401,956.07
Excess of revenue over expenditure for the year ended March 31, 1946 .....			
	\$	64,345.21	

## SURPLUS ACCOUNT

AS AT MARCH 31, 1946

Excess of revenue over expenditure for the year ended March 31, 1946 .....		\$ 64,345.21
Add:		
Interest adjustment re Rockefeller endowment investment under Province of Alberta debt reorganization programme .....		201,350.00
Transfer from reserve for wartime adjustments ....		50,451.87
Sundry adjustments of previous years' transactions, net .....		2,402.98
		<u>\$ 318,550.06</u>
Deduct: Appropriations for:		
Medical research trust .....	\$ 201,350.00	
Faculty suites .....	100,000.00	
Organ repairs and extension .....	10,000.00	
Agricultural research .....	3,025.00	
		<u>314,375.00</u>
Surplus appropriated to operating reserve .....		<u>\$ 4,175.06</u>

## STATEMENT OF CAPITAL SURPLUS ACCOUNT

AS AT MARCH 31, 1946

Balance as at March 31, 1945 .....		\$ 75,062.78
Add:		
Income Contributions—Library .....	\$ 6,758.32	
Other .....	16,300.76	
		<u>23,059.08</u>
		\$ 98,121.86
Add:		
Covered Rink donated by Students' Union .....		22,100.00
Balance as at March 31, 1946 .....		<u>\$ 120,221.86</u>

## STATEMENT OF OPERATING RESERVE

AS AT MARCH 31, 1946

Balance as at March 31, 1945 .....		\$ 12,626.79
Add:		
Transfer from Surplus Account .....		4,175.06
Balance as at March 31, 1946 .....		<u>\$ 16,801.85</u>

*To the Governors of the  
University of Alberta*

GENTLEMEN:

I have the honour to submit the following report on the work of the University of Alberta for the year ending June 30, 1946.

ROBERT NEWTON  
*President*

# *The Report of the President*

*As Presented to Convocation, May 15, 1946*

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This year for the first time I have to report that the academic work of the session does not conclude with the spring convocation. Some 450 student veterans, who registered at the beginning of January, will carry through till August. This group is one reason for our record total registration of 4,811 students, as compared with last year's record of 2,679. The other reasons are a further increase of 441 in the 1945 summer session (total 1,511) and a jump of 1,380 in the regular winter session (total 2,993). Counting both men and women, two out of every three extra students we have had this year were war veterans receiving rehabilitation benefits.

That means we have had 1,461 student veterans with us this year, and if living accommodation can be found (which unfortunately seems doubtful) there is every reason to expect at least that many more next year. Our increase this year also includes 721 civilian students (half of them in the summer session) and we turned away 150 qualified civilians last fall, asking them to wait a year in favour of the veterans, many of whom had already waited several years for an opportunity to begin university work. If these deferred civilians come forward again this fall, together with a normal crop of new matriculants from the high schools, we shall face a period of intensified overcrowding.

The large overall increase in student numbers this year was spread over all faculties and schools. I shall illustrate this by citing two of the smaller groups and two of the larger ones.

	1944-45	1945-46
Commerce .....	33	171
Law (including pre-law) .....	19	114
Applied Science .....	348	654
Education .....	160	793

The Faculty of Education is now second only to the Faculty of Arts and Science in the size of its student body. There took place here not only the post-war growth characteristic of all faculties, but a further increase due to the popularity among the teaching profession of the transference of all teacher-training to the University. Another point of interest with regard to the Faculty of Education is that 155 of its students this year were located at the Calgary branch.

I said in my report to Convocation a year ago that V-Day in Europe was D-Day in Canada. The universities are now fighting their "Battle of the Bulge". We have attacked, and must continue to attack, problems of space, equipment, and staff.

A moment ago I indicated in passing that the prospect for adequate student housing next session was not bright. A committee representing the local office of the Department of Veterans Affairs, and the University, has kept the problem under constant study for some months. A careful survey by this committee shows

that some 2,400 additional veterans, of whom about 500 are married, desire to enter the University next fall, and that there is almost no living accommodation available for them. The City of Edmonton, which undertook last year a scheme whereby 107 suites reconstructed from Dawson Creek huts, with funds advanced by the Provincial Government, were made available to university married students, announced a couple of months ago its inability to do anything further along this line. The committee has been urging the Dominion Government to advance funds for a large student housing scheme at the former American airport in Edmonton, these funds to be recovered out of rentals as in the other scheme. This seemed a reasonable thing to ask of the Dominion Government, since the need arose out of the Dominion rehabilitation scheme. However, it now appears that the Government is not prepared to finance any accommodation for single men, and not more than 100 suites for married men. The present outlook for many would-be student veterans is therefore rather gloomy.

The prime function of a university is teaching. Naturally we should co-operate wholeheartedly in any practicable housing scheme, but we would not be justified in imperilling the successful discharge of our first duty by diverting our energies to a large-scale temporary housing project for the organization of which we have neither the funds nor the machinery. The University's organization is likely to be stretched to the breaking point to provide the necessary classroom accommodation, equipment, and staff. Since VE-Day we have appointed over 100 additional instructors in various ranks, about 60 of these on a full-time basis and the remainder part-time. As every other university is doing the same sort of thing, it is not difficult to realize that keen competition for qualified personnel has developed. One of the determining factors in getting new staff members is now the possibility of finding living accommodation for them. This University, like some others, has been obliged to plan a temporary housing scheme for staff as the only way of securing the fulfilment of our teaching function.

We are trying to make the greatest possible use of our existing classrooms and equipment by running teaching schedules from 8 in the morning till 10 at night. Timetables for next session will omit any formal lunch hour, leaving staff and students to lunch at 11 or 12 or 1, depending upon which hour they have free. Through the co-operation of the City School Board we have been able to retain the former University High School building for University teaching purposes. That school moved with the Faculty of Education into the former Edmonton Normal School building. Our permanent building programme has now been launched with the letting of a contract for extending the west wing of the Medical building, and we expect to proceed with the east wing extension a little later this season. Other buildings we hope may follow in due course, though the scarcity of building materials and inflated costs make it difficult to plan with certainty. Meanwhile, we are proceeding with the erection of army huts on the campus, for use as temporary lecture rooms and laboratories, as fast as these huts can be obtained.

To illustrate the exigencies of our position I shall refer to chemistry, a subject studied by many students because it appears in the curricula of several faculties. This subject is taught in the west wing of the Medical building, where there is laboratory accommodation for about 800 students. During the past session that Department has had about 2,000 students. That explains why the contract for the extension of the west wing was let first.

The sudden expansion in the size of the student body has also posed serious questions of finance. The University Survey Committee four years ago came to the conclusion that it costs annually about \$250 per full-session student, over and above the fees paid by the student, to run the University satisfactorily. That estimate was based on the pre-war number of students. The per capita cost went up during the war as the student population diminished. It has gone down this year when our numbers went up. It is not safe, however, to count on much less than \$225 per student. During the past year our financial situation was eased by a Dominion subsidy of \$150 for each student veteran. Similar help on a slightly modified basis is expected during the coming year, and may be continued throughout the four or five years of the rehabilitation period, naturally diminishing from year to year as student veterans graduate or exhaust their period of entitlement to Dominion benefits. After that we must meet from provincial sources the full cost of higher education.

Since we may have over 4,000 full-session students next year, it can be seen that we shall require not far short of a million dollars for current expenses over and above the revenue from student fees. To this must be added substantial annual expenditures over a period of years for our building programme. We know that our Provincial Government is well disposed towards the University, and sympathetic with its needs, but we appear to be approaching dangerously near the limit of expenditure which a Government backed by only 800,000 people may reasonably be asked to support. Consequently we must consider ways and means either of reducing our expenditures or of getting access to supplementary funds.

We can reduce expenses by reducing the number of students or the number of our departments of instruction. No one likes to contemplate reducing student numbers by stiffening entrance requirements, as these requirements are already rigid enough to ensure that most students who enter are capable of profiting greatly by their university experience. We have no departments that are not serving an apparently indispensable purpose. A rumor lately circulated in regard to the possible closure of one department stirred up a storm of public protest. The same would be bound to happen in regard to any department in danger of discontinuance.

We can secure supplementary funds by raising fees, by Dominion subsidy (such as we are temporarily in receipt of now), or from private sources. We hesitate to raise fees, unless a system of scholarships can be established for able students who might be excluded by lack of means. The case for continued Dominion subsidies, after the rehabilitation period is past, must rest on the national importance of an educated citizenry and the high cost of higher education—a cost so high that the universities must have access to big money such as only a national government can command. The third source of supplementary income, private support, should become increasingly important as the Province grows older. Industries that benefit directly by the work of the University might well contribute directly to its support. Furthermore, there is an unaccountable reluctance on the part of wealthy citizens to make gifts or bequests, other than for scholarships, to a state university. One would think that because the people themselves own the University they should be the more eager to help it.

I should like to pay tribute to the hard and good work done by the staff of the University under trying conditions of overcrowding and overloading. It is



a pleasure to add that the student veterans, who were the immediate cause of the extra burden, have been exemplary in their diligence and have fully justified the efforts put forth in their behalf. We are now on a system of year-round operation. The session that opened on January 3 runs through to August, and a special summer term for a new lot of first-year student veterans will open May 21. The war, with its call to extra duty and unstinted effort, will not end on the university front for some years yet.

\* \* \*

Appended to this report are tabular data concerning academic staff numbers; academic staff appointments and promotions, return from war service, leave of absence, retirements, and resignations; student registration; gifts; new scholarships, prizes, and medals; staff publications; and excerpts from the reports of the Deans, Directors, Librarian, Provost, and Commanding Officers of military training units.

**Table I.—Academic Staff Numbers**

*Full-Time Teaching Staff*

Professors .....	44	
Associate Professors .....	32	
Assistant Professors .....	28	
Lecturers .....	15	
Instructors .....	38	
	<hr/>	157
On War Service:		
Professors .....	1	
Associate Professors .....	2	
Assistant Professors .....	1	
Lecturers .....	2	

*Part-Time Teaching Staff*

Professors .....	18	
Associate Professors .....	3	
Assistant Professors .....	11	
Lecturers .....	21	
Instructors .....	46	
Demonstrators and student assistants .....	143	
	<hr/>	242
On War Service:		
Lecturers .....	3	
Instructors .....	8	

*Department of Extension*

Director .....	1
Assistant Director .....	1
Librarian .....	1
Assistant in Study Groups .....	1

### *Department of Industrial Research*

Research Professor .....	1
Assistant Research Professor .....	1
Chemist .....	1
Research Chemist .....	1
Assistant Chemist .....	1
Field Assistants .....	2
	<hr/> 7

### *Library*

Librarian .....	1
Reference Librarian .....	1
Chief Cataloguer .....	1
Junior Assistants .....	4
	<hr/> 7

### *Industrial Laboratories*

Director .....	1
Assistant .....	1
	<hr/> 2

### *Provincial Laboratory*

Director, Provincial Bacteriologist .....	1
Pathologist, Provincial Serologist .....	1
Acting Provincial Bacteriologist .....	1
Assistant Pathologist .....	1
Assistant in Bacteriology .....	1
	<hr/> 5

Total .....	424
Less duplicates .....	5
	<hr/>

Total Academic Staff .....	419
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## **Table II.—Academic Staff Appointments and Promotions**

### *Faculty of Arts and Science*

- John Macdonald, M.A., D.Litt., Dean of the Faculty of Arts and Science.
- Walter Hugh Johns, B.A., Ph.D., Secretary of the Faculty of Arts and Science.
- George Otty Langstroth, B.A., Ph.D., F.R.S.C., Professor of Physics.
- John Reymes-King, M.A., Mus.B., A.R.C.M., F.R.C.O., Professor of Music.
- Winnifred Hughes, M.A., Ph.D., from Assistant Professor to Associate Professor of Zoology.
- Stuart George Davis, M.Sc., Ph.D., from Lecturer to Assistant Professor of Chemistry.
- Donald Burton Scott, B.A., Ph.D., from Lecturer to Assistant Professor of Physics.
- Philip Harry Godsell, F.R.G.S., Director, Alberta Folklore and Local History Project.
- Aylmer Arthur Ryan, M.A., Sessional Lecturer in English.

Sybil Fratkan, M.Sc., Sessional Instructor in Chemistry.  
 James Charles Nichol, M.Sc., Sessional Instructor in Chemistry.  
 John Brian Reesor, B.Sc., Sessional Instructor in Chemistry.  
 Alexander Allen Robertson, B.Sc., Sessional Instructor in Chemistry.  
 James Maxwell Roxburgh, B.Sc., Sessional Instructor in Chemistry.  
 Colin Douglas Gordon, B.A., Sessional Instructor in Classics.  
 James Ernest Gander, B.A., B.Ed., Sessional Instructor in English.  
 Charles Richard Stelck, M.Sc., Sessional Instructor in Geology.  
 Gordon Francis Dalsin, Sessional Instructor in Mathematics.  
 Thorlief Fostvedt, B.Sc., Sessional Instructor in Mathematics.  
 Reginald Charles Jacka, B.Sc., Sessional Instructor in Mathematics.  
 Anatol Roshko, B.Sc., Sessional Instructor in Mathematics.  
 Eoin Laird Whitney, Sessional Instructor in Mathematics.  
 Maurice Lavallee, Sessional Instructor in French.  
 Mrs. Francis Owen, M.A., Sessional Instructor in French and German.  
 Henri de Savoye, B-es-L., L-en-D., O.I.P., Sessional Instructor in French.  
 Brigham Young Card, B.Sc., Sessional Instructor in Physics.  
 Arthur James Filmer, B.Sc., Sessional Instructor in Physics.  
 Donald D. Levi, B.Sc., Sessional Instructor in Physics.  
 James Gordon Weeks, B.Sc., Sessional Instructor in Physics.

#### *School of Commerce*

W. G. Skinner, C.A., Sessional Instructor in Accounting.

#### *Faculty of Agriculture*

Paulden Ford Knowles, M.Sc., Ph.D., Assistant Professor of Field Crops.  
 Ralph Hanson, B.Sc., Instructor in the Diploma Course in Dairying.  
 Alex Robinson Robblee, B.Sc., Sessional Instructor in Poultry.

#### *Faculty of Applied Science*

Robert McDonald Hardy, M.Sc., D.L.S., A.L.S., S.L.S., from Associate Professor to Professor of Civil Engineering.  
 Elio D'Appolonia, B.Sc., from Sessional Instructor to Lecturer in Civil Engineering.  
 George Ford, B.Sc., from Sessional Instructor to Lecturer in Civil Engineering.  
 Ralph Norman McManus, B.Sc., from Sessional Instructor to Lecturer in Civil Engineering.  
 Frederick McPherson, B.Sc., from Sessional Instructor to Lecturer in Civil Engineering.  
 Joseph McGill Casault, B.Sc., Sessional Instructor in Civil Engineering.  
 Jack Longworth, B.Sc., Sessional Instructor in Civil Engineering.  
 Jack Lloyd Simpson, B.Sc., Sessional Instructor in Civil Engineering.  
 Stewart Robert Sinclair, B.Sc., Sessional Instructor in Civil Engineering.  
 Edwin Keith Cumming, B.Sc., Sessional Instructor in Mechanical Engineering.  
 Harold Leslie Cormick, B.Sc., Sessional Instructor in Electrical Engineering.  
 Duncan Thomas Bath, B.Sc., Sessional Instructor in Electrical Engineering.

#### *Faculty of Dentistry*

Hector Robert MacLean, D.D.S., from Assistant Professor to Associate Professor of Operative Dentistry.

Whitmore Pipes Calhoun, B.A., D.D.S., from Lecturer to Assistant Professor of Operative Dentistry.

Arthur Benjamin Mason, D.D.S., from Lecturer to Assistant Professor of Peridontia.

Reyburn R. McIntyre, L.D.S., D.D.S., from Lecturer to Assistant Professor of Orthodontia.

Robert Arthur Rooney, D.D.S., from Lecturer to Assistant Professor of Prosthetic Dentistry.

#### *Faculty of Education*

Clarence Sansom, B.A., Ph.D., Acting Director, Calgary Branch, Faculty of Education.

Andrew Leo Doucette, M.A., from Assistant Professor to Associate Professor of Education.

Helen Barbara Stadelbauer, Lecturer in Art.

Bertha Newton, B.Sc. in Ed., A.M., Instructor in Primary Methods.

Maimie Shaw Simpson, M.Sc., M.Ed., Demonstrator in English.

#### *Faculty of Law*

Wilbur Fee Bowker, B.A., LL.B., Associate Professor of Law.

#### *Faculty of Medicine*

John James Ower, V.D., B.A., M.D., C.M., D.L.O., Dean of the Faculty of Medicine.

Gordon Cameron Gray, M.B., F.A.C.S., F.R.C.S.(C), from Associate Professor to Clinical Professor of Surgery.

Randall Roberts MacLean, M.D., from Assistant Professor to Clinical Professor of Psychiatry.

Percy Harry Sprague, M.D., M.Sc., F.A.C.P., from Assistant Professor to Clinical Professor of Medicine.

James Augustus Romeyn, B.A., M.D., from Assistant Professor to Associate Professor of Bacteriology.

Nathaniel James Minish, M.D., Assistant Professor of Anatomy.

H. G. Skinner, M.D., Assistant Professor of Physiology and Pharmacology.

Samuel Hanson, M.D., Honorary Lecturer in Pathology.

Eleanor Silver Keeping, M.Sc., Ph.D., Sessional Lecturer in Mycology.

James Calder, M.D., from Instructor to Lecturer in Pediatrics.

Glen Ross Davison, M.D., C.M., from Instructor to Lecturer in Clinical Medicine.

James Francis Elliott, B.A., M.D., F.R.C.P.(C), Lecturer in Clinical Medicine.

Charles Brambell Rich, B.Sc., M.R.G.S., L.R.C.P., F.R.C.P.(C), Lecturer in Clinical Medicine.

Robert Kenneth Colquhoun Thompson, B.Sc., M.D., from Instructor to Lecturer in Clinical Medicine.

Thomas Roy Clarke, M.D., from Instructor to Lecturer in Obstetrics and Gynaecology.

Ronald Hilborn Horner, M.D., F.A.C.S., from Instructor to Lecturer in Obstetrics and Gynaecology.

Alexander Havelock MacLennan, B.Sc., M.D., from Instructor to Lecturer in Obstetrics and Gynaecology.

Enid Mary Newland Tredger, B.A., M.D., Lecturer in Pathology.  
 Walter Stirling Anderson, B.Sc., M.D., M.S., F.R.C.S.(C), F.A.C.S., from  
 Instructor to Lecturer in Clinical Surgery.  
 William Carleton Whiteside, M.D., F.R.C.S.(C), F.A.C.S., from Instructor  
 to Lecturer in Clinical Surgery.  
 John William McAlister, M.C., M.D., C.M., Honorary Instructor in Psychiatry.  
 Marshall Mallett, M.D., C.M., Honorary Instructor in Radiology.  
 Guy Kent Morton, M.D., Honorary Instructor in Clinical Surgery.  
 Dudley Blair Menzies, B.Sc., S.M., Instructor in Hygiene.  
 Astor Ralph Schrag, M.D., Instructor in Mental Hygiene.  
 Gordon Irving Bell, M.D., Instructor in Clinical Medicine.  
 Edward Ferris Donald, M.D., Instructor in Clinical Medicine.  
 Frederick George Elliott, M.D., C.M., Instructor in Clinical Medicine.  
 Margaret MacSteven Hutton, B.A., M.D., from Demonstrator to Instructor  
 in Obstetrics and Gynaecology.  
 John Weightman Bridge, M.B.E., B.A., M.D., Instructor in Clinical Surgery.  
 Frederick David Conroy, M.D., Instructor in Urologic Surgery.  
 Max Edwin Geissinger, M.D., F.R.C.S.(C), Instructor in Clinical Surgery.  
 William Nelson Gourlay, M.D., F.A.C.S., Instructor in Clinical Surgery.  
 Walter Campbell MacKenzie, B.Sc., M.D., C.M., M.S., from Assistant In-  
 structor to Instructor in Clinical Surgery.  
 Olav Rostrup, M.D., Instructor in Orthopedic Surgery.  
 Moses Weinlos, B.A., M.D., F.R.C.S., Instructor in Clinical Surgery.  
 Rupert McConnell Clare, M.D., Assistant Instructor in Radiology.

#### *School of Pharmacy*

Walter Howard Sprague, Instructor in Pharmacy.

#### *Library*

Marjorie Sherlock, B.A., B.L.S., Librarian.  
 Helen Elizabeth Farquharson, M.A., B.L.S., Chief Cataloguer.

#### *Department of Physical Education*

Maurice Lewis Van Vliet, M.S., Professor of Physical Education.

#### *Other Appointments*

Percival Sydney Warren, B.A., A.R.C.S., Ph.D., F.R.S.C., Provost.  
 Hazel McIntyre, B.Sc., M.S., Adviser to Women Students.  
 Mary Helena Faunt, B.A., Warden of Pembina Hall.  
 Aylmer Arthur Ryan, M.A., Warden of Assiniboia Hall.  
 Floyd Silas Beverly Rodman, M.Sc., Ph.D., Warden of Athabaska Hall.  
 Edgar Harold Strickland, M.Sc., Director of Rehabilitation Courses.  
 Alexander Joseph Cook, B.Sc., M.A., Ph.D., Adviser to Student Veterans.  
 Joe Kastelic, M.Sc., Director of the Nutrition Laboratory.

### **Table III.—Return from War Service**

John Thomas Jones, M.A., B.A., Associate Professor of English.  
 Lewis Gwynne Thomas, M.A., Lecturer in History.  
 James Howden Whyte, B.Sc., M.Sc., Ph.D., Assistant Professor of Botany.  
 Edward Joseph Hollingsworth Greene, M.A., Lecturer in French.

Jonas Christian Jonason, M.A., Associate Professor of Education.  
 James Augustus Romeyn, B.A. M.D., Assistant Professor of Bacteriology.  
 Douglas Smith, M.A., Ph.D., Assistant Professor of Philosophy.  
 Andrew Leo Doucette, M.A., Associate Professor of Education.

#### Table IV.—Leave of Absence

John William Gilles, M.A., M.Ed., Associate Professor of Education.  
 George Malcolm Smith, M.C., B.A., M.A., Professor of History.  
 Leroy Allan Thorssen, B.Sc., Associate Professor of Civil Engineering.

#### Table V.—Retirements

Donald Ewing Cameron, M.A., Adviser to Student Veterans and former Librarian.

#### Table VI.—Resignations

Agnes Jean Macleod, B.A., B.Sc., M.A., R.N., Assistant Professor of Public Health Nursing and Health Education and Director of the School of Nursing.  
 Vladimir Ignatieff, B.Sc., M.Sc., Ph.D., Assistant Professor of Soils.  
 Harold Elford Johns, B.A., M.A., Ph.D., Lecturer in Physics.  
 David Clemens Appelt, M.A., A.B.L.S., Library Cataloguer.  
 Kathleen Emily Beatrice Foscett, B.A., Lecturer in Physical Education for Women.  
 Malcolm Murray MacIntyre, B.A., L.L.B., L.L.M., S.J.D., Professor of Law and Dean of the Faculty of Law.  
 Floyd Silas Beverly Rodman, M.Sc., Ph.D., Assistant Professor of Physiology and Pharmacology.  
 Reyburn R. McIntyre, L.D.S., D.D.S., Lecturer in Orthodontia.  
 Allan Douglas Hogg, B.Sc., M.Sc., Ph.D., Assistant Professor of Mechanical Engineering.  
 William John McAlister, M.D., C.M., Instructor in Mental Hygiene.  
 Arnold Whitney Matthews, M.Sc., Ph.D., Professor of Pharmacy and Director of the School of Pharmacy.  
 Virginia Pearson, B.Sc., R.N., Science Instructor, School of Nursing.  
 Robert William Bradley, D.D.S., Lecturer in Operative Dentistry.  
 Gordon Bertram Thurston, L.D.S., D.D.S., Lecturer in Operative Dentistry.  
 James Sheldon Shoemaker, B.S.A., M.S., Ph.D., Professor of Horticulture.  
 Walter Lewis Dunkley, M.Sc., Ph.D., Lecturer in Dairying.  
 Mary Helena Faunt, B.A., Lecturer in French.  
 Ernest Geoffrey Cullwick, M.A., F.R.S.A., Professor of Electrical Engineering.



**Table VII.—Registration by Faculties—Session 1945-46**  
(1944-45 in Brackets)

Total Registration .....				4811(2679)
		Men	Women	Total
<b>I.—Full Session Students</b> .....		2364(972)	1083(593)	3447(1565)
(1) Faculty of Arts and Science .....		798(237)	344(274)	1142( 511)
	Men	Women	Total	
B.A. ....	67( 22)	107(79)	174(101)	
B.Sc. ....	282( 76)	85(64)	367(140)	
School of Commerce .....	156( 19)	15(14)	171( 33)	
School of Household Economics .....		115(97)	115( 97)	
Combined Courses:				
B.Sc., M.D. ....	124( 70)	12( 8)	136( 78)	
B.Sc. for D.D.S. ....	84( 31)	1	85( 31)	
B.Sc., D.D.S. ....	3		3	
B.A., B.Sc. in App. Sci. ....	2		2	
B.A., B.Com. ....	5( 1)		5( 1)	
B.A., B.Sc. in Ag. ....	1		1	
B.A., B.Ed. ....	1( 2)	4( 7)	5( 9)	
B.Sc., B.Ed. ....	2( 6)	1( 4)	3( 10)	
B.A., LL.B. ....	71( 10)	4	75( 10)	
B.Com., B.Ed. ....		( 1)	( 1)	
(2) Faculty of Agriculture .....		186( 60)	3	189( 60)
(3) Faculty of Applied Science .....		650(346)	4( 2)	654( 348)
(4) Faculty of Dentistry .....		57( 48)	1( 3)	58( 51)
	54	1	55	
Add 3 men carried forward out of accelerated fourth year, January to September, 1945 .....	3		3	
(5) Faculty of Education .....		334( 68)	459( 92)	793( 160)
<b>Edmonton:</b>				
B.Ed. ....	202( 25)	135(62)	337( 87)	
Partial .....	36( 40)	12(21)	48( 61)	
B.Ed. in H.Ec. ....		( 3)	( 3)	
B.A., B.Ed. ....	3( 2)	8( 4)	11( 6)	
B.Sc., B.Ed. ....	3( 1)	1	4( 1)	
B.Com., B.Ed. ....		1	1	
Special .....		( 2)	( 2)	
War Emergency .....	49	188	237	
	293( 68)	345(92)	638(160)	
<b>Calgary:</b>				
B.Ed. ....	3	13	16	
B.Ed. (Indust. Arts) ....	20		20	
War Emergency .....	18	101	119	
	41	114	155	
(6) Faculty of Law .....		39( 9)		39( 9)
(7) Faculty of Medicine .....		184(160)	242(195)	426( 355)
Medicine .....	122	12	134	
Add 17 men and 2 women carried forward from the accelerated 4th and 5th years, Jan. to Dec., 1945 .....	17	2	19	
	139(146)	14(18)	153(164)	
Nursing Degree .....		85(69)	85( 69)	
Nursing Diploma .....		100(79)	100( 79)	
Public Health Diploma ..		14( 4)	14( 4)	
Pharmacy Degree .....	40( 11)	23(19)	63( 30)	
Pharmacy Diploma .....	5( 3)	6( 6)	11( 9)	
(8) Graduate Students .....		105( 72)	20( 22)	125( 94)
M.A. ....	18( 16)	6( 8)	24( 24)	
M.A. in Ed. ....	1( 1)		1( 1)	
M.Sc. ....	20( 8)		20( 8)	
M.Sc. in Ag. ....	21( 15)		21( 15)	

M.Sc. in App. Sci. ....	14( 5)	14( 5)		
M.Ed. ....	17( 17)	4( 2)	21( 19)	
Special ....	14( 10)	10(12)	24( 22)	
(9) Divinity .....		6( 9)		6( 9)
(10) Special .....		1( 5)	2	3( 5)
(11) Auditors .....		4( 1)	8( 10)	12( 11)
II.—Summer Session Students (1945) .....		433(283)	1078(787)	1511(1070)
Edmonton .....	402	1075	1477	
Calgary .....	31	3	34	
III.—Short Courses .....		18( 19)	4( 71)	22( 90)
(1) Summer Session for graduate Nurses (May 27 to Aug. 6, 1944) .....		(27)	( 27)	
(2) Special course in Obstetrical Nursing, end of Sept. to end of Jan., 1946 (in 1944, beginning end of Sept., 3 months) ..		4( 4)	4( 4)	
(3) Short Course for Administrators for small hospitals, 10 weeks (beginning end of Jan. 1945). ..		( 8)	( 8)	
(4) Special 6 week course in Biochem- istry, 51, 52 (June 1 to July 15, 1944) ..	( 2)	(11)	( 13)	
(5) Diploma Course in Dairying, 6 months (in 1945, Feb. 19 to Mar. 17) .....	18( 17)	( 1)	18( 18)	
Summary				
I. Full Session Students .....	2364(1015)	1083( 598)	3447(1613)	
II. Summer Session Students (1945) .....	433( 283)	1078( 787)	1511(1070)	
III. Short Courses .....	18( 19)	4( 71)	22( 90)	
	2815(1317)	2165(1456)	4980(2773)	
Less duplicates .....	115( 51)	54( 43)	169( 94)	
Total .....	2700(1266)	2111(1413)	4811(2679)	

**Table VIII.—Registration According to Rehabilitation and Civilian Students, Session 1945-46**

I.—Full Session Students: (1) Faculty of Arts and Science:	SEPTEMBER CLASS				JANUARY CLASS				TOTAL	
	Men		Women		Men		Women		Men	Women
	Re. Civ.	Re. Civ.	Re. Civ.	Total Re. Civ.	Re. Civ.	Re. Civ.	Re. Civ.	Total Re. Civ.		
B.A. ....	24	27	3	100	27	127	4	20	67	174
B.Sc. ....	89	154	3	79	92	233	3	42	282	367
School of Commerce ..	73	28	1	14	74	42	...	55	156	171
School of Household Economics ..	...	...	9	103	9	103	3	3	115	115
Combined Courses:										
B.Sc., M.D. ....	47	39	...	10	47	49	2	40	124	136
B.Sc., for D.D.S. ....	37	5	1	...	38	5	...	42	84	85
B.Sc., D.D.S. ....	...	3	...	...	...	3	...	...	3	3
B.A., B.Sc., in App. Sci. ....	2	2	...	...	...	2	...	...	2	2
B.A., B.Com. ....	...	1	...	...	...	1	...	1	5	5
B.A., B.Sc. in Ag. ....	1	...	...	4	1	1	...	...	1	1
B.A., B.Ed. ....	1	1	...	1	1	2	...	...	1	4
B.Sc., B.Ed. ....	29	22	...	3	29	25	1	21	71	5
B.A., LL.B. ....	...	...	...	...	...	...	...	...	2	3
Total .....	303	284	17	314	320	598	13	224	798	1142
(2) Faculty of Agriculture:										
Total .....	76	77	...	3	76	80	...	33	186	189
(3) Faculty of Applied Science:										
Total .....	256	248	...	4	256	252	...	138	650	654
(4) Faculty of Dentistry .....	13	41	...	1	13	42	...	...	...	...
Add 3 men carried forward out of accelerated fourth year January to September, 1945 .....	...	3	...	...	...	3	...	...	...	...
Total .....	13	44	...	1	13	45	...	...	57	58

## (5) Faculty of Education:

Edmonton:	112	47	9	118	121	165	43	...	8	...	51	...	202	135	337
B.Ed.	2	34	...	12	2	46	...	...	...	...	...	...	36	12	48
Partial	2	1	...	8	2	9	...	...	...	...	...	...	3	8	11
B.A., B.Ed.	...	3	...	1	...	4	...	...	...	...	...	...	3	1	4
B.Sc., B.Ed.	...	...	...	1	...	1	...	...	...	...	...	...	...	1	1
B.Com., B.Ed.	4	45	...	188	4	233	...	...	...	...	...	...	49	188	237
War Emergency	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total in Edmonton	120	130	9	328	129	458	43	...	8	...	51	...	293	345	638
Calgary:	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B.Ed.	...	3	...	13	...	16	...	...	...	...	...	...	3	13	16
B.Ed. (Industrial Arts)	7	13	...	101	7	13	...	...	...	...	...	...	20	...	20
War Emergency	...	18	...	119	...	119	...	...	...	...	...	...	18	101	119
Total in Calgary	7	34	...	114	7	148	...	...	...	...	...	...	41	114	155
Total, Edmonton and Calgary	127	164	9	442	136	606	43	...	8	...	51	...	334	459	793
(6) Faculty of Law:	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	30	9	...	...	30	9	...	...	...	...	...	...	39	...	39
(7) Faculty of Medicine	20	102	1	11	21	113	...	...	...	...	...	...	...	...	...
Add 17 men and 2 women car-	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
ried forward from the accel-	...	17	...	2	...	19	...	...	...	...	...	...	...	...	...
erated 4th and 5th years, Jan.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
to Dec., 1945	20	119	1	13	21	132	...	...	...	...	...	...	139	14	153
Nursing Degree	...	...	...	85	...	85	...	...	...	...	...	...	...	85	85
Nursing Diploma	...	...	...	100	...	100	...	...	...	...	...	...	...	100	100
Public Health Diploma	...	...	8	6	8	6	...	...	...	...	...	...	...	14	14
Pharmacy Degree	25	15	...	23	25	38	...	...	...	...	...	...	40	23	63
Pharmacy Diploma	5	...	1	5	6	5	...	...	...	...	...	...	5	6	11
Total	50	134	10	232	60	366	...	...	...	...	...	...	184	242	426
(8) Graduate Students:	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
M.A.	5	13	...	6	5	19	...	...	...	...	...	...	18	6	24
M.A. in Ed.	1	1	...	...	1	...	...	...	...	...	...	...	1	...	1
M.Sc.	5	15	...	...	5	15	...	...	...	...	...	...	20	...	20
M.Sc. in Agric.	7	14	...	...	7	14	...	...	...	...	...	...	21	...	21
M.Sc. in App. Sci.	4	10	...	...	4	10	...	...	...	...	...	...	14	...	14
M.Ed.	1	16	1	3	2	19	...	...	...	...	...	...	17	4	21
Special	5	9	...	10	5	19	...	...	...	...	...	...	14	10	24
Total	28	77	1	19	29	96	...	...	...	...	...	...	105	20	125

Table VIII—Registration According to Rehabilitation and Civilian Students, Session 1945-46—Concluded

	SEPTEMBER CLASS				JANUARY CLASS				TOTAL	
	Men		Women		Men		Women		Men	Women
	Re. Civ.	Re. Civ.	Re. Civ.	Total Re. Civ.	Re. Civ.	Re. Civ.	Re. Civ.	Total Re. Civ.		
(9) Divinity:	...	6	...	6	...	...	...	...	6	...
(10) Special	...	1	...	3	...	...	...	...	1	2
(11) Auditors	...	4	...	12	...	...	...	...	4	8
Total in I	883	1048	37	920	425	8	21	446	2364	1083
II.—Summer Session (1945)										
Edmonton	69	333	5	74	...	...	...	...	402	1075
Calgary	3	28	...	3	...	...	...	...	31	3
Total in II	72	361	5	77	...	...	...	...	433	1078
III.—Short Courses:										
(1) Special course in Obstetrical Nursing (end of Sept. to end of Jan. 1946)	...	...	...	...	...	4	...	...	...	4
(2) Diploma Course in Dairying (6 months)	18	...	...	18	...	...	...	...	18	...
Total in III	18	...	...	18	...	4	...	...	18	...
Total in I, II, III	973	1409	42	1015	425	8	21	446	2815	2165
Less duplicates	57	58	4	61	...	...	...	...	115	54
TOTAL	916	1351	38	954	425	8	21	446	2700	2111

**Table IX.—Registration of Students According to Place of Birth,  
Session 1945-46**

1. British Empire .....				3202
(a) Canada .....				3126
Alberta .....	2483	Nova Scotia .....	20	
Saskatchewan .....	311	Quebec .....	14	
British Columbia .....	112	P.E. Island .....	8	
Manitoba .....	104	New Brunswick.....	4	
Ontario .....	70			
(b) Other parts of the British Empire .....				76
England .....	44	Australia .....	1	
Scotland .....	14	Jamaica .....	1	
Ireland .....	8	Newfoundland .....	1	
Wales .....	7			
2. Foreign Countries .....				191
United States .....	78	Denmark .....	4	
Poland .....	35	Roumania .....	4	
Russia .....	14	Austria .....	3	
Hungary .....	10	Sweden .....	3	
Norway .....	8	China .....	2	
Ukraine .....	7	Jugoslavia .....	2	
Czechoslovakia .....	6	Holland .....	2	
Germany .....	5			
and one from each of the following: Africa, Esthonia, Latvia, Fiji Islands, France, Greece, Italy, Japan.				
3. Not Specified .....				32
				<hr/> 3425
Adjustment:				
Summer Session .....				1511
Short Courses .....				22
Accelerated adjustment in Medicine .....				19
Accelerated adjustment in Dentistry .....				3
				<hr/> 1555
Less duplicates .....				169
				<hr/> 1386
Total .....				<hr/> 4811

**Table X.—Registration of Students According to Home Address,  
Session 1945-46**

1. Canada .....				3346
Alberta .....	3080	Ontario .....	8	
Saskatchewan .....	134	New Brunswick .....	2	
British Columbia .....	105	Quebec .....	1	
Manitoba .....	16			
2. Foreign Countries .....				6
United States .....				4
England .....				1
Jamaica .....				1



3. Not Specified .....	73
Adjustment .....	3425
	1386
Total .....	4811

### Table XI.—Gifts

From the National Research Council, \$14,389.48 for research in the Department of Field Crops, \$13,610.49 for war projects, \$4,136.78 for research in the Department of Soils, \$1,250 for cancer research, \$700 for chemical research.

From the Dominion Department of Labour, \$15,000 to help meet additional costs of accelerated courses in Medicine and Dentistry.

From the "Friends of the University": 126 individual members, \$2,081; by the will of the late Mr. A. C. Archibald, \$500; Burns & Co. Limited, \$500 for research in the Department of Animal Science.

From the Rockefeller Foundation, \$3,948.80 in support of the Alberta Folklore and Local History Project.

From the United Grain Growers Limited, \$1,000 for research in the Department of Plant Science and \$300 for research in the Department of Animal Science.

From Canada Malting Company Limited, \$1,000 for research in the Department of Plant Science.

From Mrs. J. H. Woods, \$500 as the third and last instalment of a grant in aid of Dr. Sandin's cancer research.

From the Alberta Division, Canadian Red Cross Society, \$800 as an accountable advance for the Red Cross Nutrition Project being carried on by Dr. George Hunter.

From the National Grain Company Limited, \$500 for research in weed eradication in the Department of Plant Science.

From Ogilvie Flour Mills Co. Ltd., \$500 for research in the Department of Animal Science.

From the Alberta Dental Association, \$200 to the Faculty of Dentistry to help organize refresher or other courses for men returning from active service.

From the Class of 1945, a \$100 Victory Bond.

From the Class of 1946, a \$100 Victory Bond to be applied to the War Memorial Fund.

From the Edmonton Horticultural Society, \$50 to assist Dr. Shoemaker's work with the trial garden.

From Miss N. Burkholder, a cut of the Garneau homestead and three prints of drawings relating to the early history of McDougall Church.

From the College of Physicians and Surgeons, \$200 to buy books and periodicals for the Medical Library.

From Mrs. Catherine Boomer, the technical library of the late Dr. E. H. Boomer.

From Mr. S. W. Field, a complete set (25 volumes) of Canadian Bankruptcy Reports.

By the will of the late Mr. T. M. Wears, nine files of Shakesperian literature.

From Mr. Howden R. Horner, a further donation of \$100 to the Frank Wyeth Horner Memorial Fund for the purchase of books on pharmacy:

From the Philosophical Society, a grant of \$58.62 for the purchase of books.  
From Mr. G. N. Houston, the Transactions of the American Society of Civil Engineers, 1898-1936.

From Mrs. R. H. Ghiselin, a collection of books on philosophy, formerly the property of her late son, Mr. Richard Ghiselin.

From Mr. G. M. Smith, of the Department of History, a collection of books on history and current literature.

From the University of Western Ontario, 11 volumes of the Publications of the Parker Society.

From Mr. R. P. Pettipiece, the two earliest volumes of the South Edmonton News, 1894-45.

From Mr. A. Turner Bone, a collection of 50 to 60 volumes of modern French literature.

### **Table XII.—New Scholarships, Prizes, and Medals**

*Tenable at the University of Alberta or available to University of Alberta Students:*

From Standard Investments Limited, through Mr. Justice Parlee, the third instalment of \$7,500 in support of the President's Scholarship Fund.

From the Western Canada Dental Society, an initial gift of \$1,000 to establish the H. M. Garvin Trust Fund for Dental Scholarships.

From the City of Calgary, six annual scholarships of \$300 each for Calgary students, tenable at the University of Alberta or at Mount Royal College.

From the Imperial Order Daughters of the Empire, the Provincial Chapter of Alberta, four annual bursaries of \$100 each for students entering the Faculty of Education from the high schools of Alberta, to be known as the Marshall Bursaries.

From Shell Oil Company, an annual fellowship of \$750, plus university fees and certain expenses, for a student pursuing research studies leading to a post-graduate degree at the University of Alberta.

From Imperial Oil Limited, four annual fellowships of \$1000 for post-graduate work leading to a Master's or Ph.D. degree, to be awarded to students graduating from Canadian universities.

From the Canadian Bar Association, under the terms of a deed of gift from the Right Honourable Viscount Bennett, a \$1000 scholarship for post-graduate study in law, to be awarded to a graduate of an approved law school in Canada.

From the Quota Club International, District 11, a bursary to cover tuition in the School of Social Service at either the University of Manitoba or the University of British Columbia, to be awarded in alternate years to graduates of the Universities of Alberta and Saskatchewan.

From Mr. and Mrs. Leslie H. Irwin, \$850 in bonds and \$25 in cash, the principal to endow in perpetuity the Fred H. Irwin Memorial Prize in Organic Chemistry.

From Winspear, Hamilton, Anderson & Company, two annual scholarships of \$250 for students in the School of Commerce.

From the University Women's Club of Edmonton, a bursary of \$325 for a woman graduate of the class of 1946, and four prizes of \$25 for ex-service women.

From the Ladies' Auxiliary, Canadian Dental Corps, two scholarships of \$100 to be awarded upon graduation to veterans entering the first year of the Faculty of Dentistry during the academic years 1946-47 and 1947-48.

From the United Farmers of Alberta, \$100 for a third-year student in Agriculture, and \$100 for a graduate student doing agricultural research work, to be known as the Robert Gardiner Memorial Scholarships.

From Charles E Frosst Company, two prizes of \$50 each and four of \$25 each for student veterans in the first year of the School of Pharmacy.

From the National Council of Jewish Women, Calgary Section, four \$25 prizes for students in the Department of Fine Arts.

From the J. W. Dafoe Foundation, two annual prizes of \$100 in essay competitions open to students of the University of Alberta.

From Dr. R. K. Gordon, the English Writing Prize of \$50 for the student obtaining the highest standing in English 65.

From the Edmonton Dental Society, two prizes of \$50 for students with the highest standing in the work of the first and third years respectively

From the National Council of Jewish Women, Edmonton Section, a prize of \$50, available each year for five years, to be known as the Mrs. H. A. Friedman Prize in Household Economics.

From Mr. Hiram McCann, Managing Editor of "Food in Canada", an annual essay prize of \$25.

From the Education Society of Edmonton, an annual prize of \$25 for a first-year student in the Faculty of Education.

From the Delta Phi Chapter of the Delta Kappa Epsilon Fraternity, a \$25 prize in memory of fraternity brothers who gave their lives in the Second Great War, to be known as the D.K.E. Memorial Prize in Chemistry 40.

From the Science Association, an annual research prize of \$25.

From Dairy Supplies Limited, \$20 for prizes in the Diploma Course in Dairying.

From Walker-Wallace Limited, \$20 for prizes in the Diploma Course in Dairying.

From the Alberta Dairymen's Association, a gold medal for award to the student with the highest standing in the Diploma Course in Dairying.

From Miss E. N. Thompson, \$10 in books, to be known as the Charles James Thompson Memorial Prize in English 4.

From Merck & Co. Ltd., a book prize for the first-year student in the School of Pharmacy attaining the highest standing in Chemistry.

From the Associated Hospitals of Alberta, \$10 in books, to be known as the James McDonald Taylor Memorial Prize.

*Available to students studying under the Western Board of Music:*

*For the Prairie Provinces:*

From the French Government, two one-year scholarships entitling the winners to free tuition at a French Government institution, with a monthly grant for living expenses.

From the Peabody Conservatory of Music, a scholarship to be awarded to a stringed instrument player, covering tuition for the term 1946-47 at this Conservatory.

*For Alberta:*

From Northwestern Utilities Limited, \$300.

From the Imperial Order Daughters of the Empire, Alberta Provincial Chapter, \$300.

From the Calgary Herald, \$200.

From the Hudson's Bay Company, \$200.  
 From T. Eaton Co. Western Ltd., \$200.  
 From the Women's Canadian Club of Edmonton, \$100.  
 From the Edmonton Women's Musical Club, \$100.  
 From the Edmonton Civic Opera Society, \$100.  
 From the Edmonton Journal, \$100.  
 From Radio Station CJCA, \$100.  
 From Radio Station CFRN, \$100.  
 From Radio Station CKUA, \$100.  
 From C. Woodward Limited, \$100.  
 From Robinson & Sons, \$75.  
 From the National Music Company, \$50.  
 From Heintzman & Company, Limited, \$50.  
 From Johnstone Walker Limited, \$50.  
 From Mrs. V. P. Brough, \$50.  
 From the National Council of Jewish Women, Edmonton Section, \$25.  
 From the Medicine Hat Music Teachers' Association, two book prizes.

### Table XIII.—Publications by Staff

#### *Department of Anatomy*

Shaner, R. F. A human embryo of two to three pairs of somites. *Can. J. Res.* 23:235-243. 1945.

#### *Department of Animal Science*

Sinclair, R. D. Swine production in Alberta. (6th revision). Univ. Alta. Fac. Agr. Bull. 22. Jan. 1946.  
 Clandinin, D. R. Diseases in poultry. Univ. Alta. Fac. Agr. Bull. 45. Feb. 1945.

#### *Department of Biochemistry*

Tuba, J., Hunter, G., and Steele, H. R. On the specificity of dye titration for ascorbic acid. *Can. J. Res.* 24:37-45. 1945.  
 Tuba, J., and Hunter, G. Isolation of ascorbic acid from rose hips. *Can. J. Res.* 24:46-50. 1946.

#### *Department of Botany*

Cormack, R. G. H. Cell elongation and the development of root hairs in tomato roots. *Am. J. Bot.* 32:490-496. 1945.

#### *Department of Chemistry*

Walker, O. J., and Gainer, G. C. Determination of fluorides in water by means of a photoelectric colorimeter. *Can. J. Res. B*, 23:275-280. 1945.  
 Walker, O. J. Alberta alumni and the atomic bomb. *New Trail.* 4(5):6-10. 1946.  
 Sandin, R. B., and Kitchen, R. The synthesis of some 9, 10-dialkylanthracenes and 4, 9-dialkylbenzthiophanthrenes. *J. Am. Chem. Soc.* 67:1305-1307. 1945.  
 Nichol, J. C., and Sandin, R. B. The identification of air iodides. *J. Am. Chem. Soc.* 67:1307-1308. 1945.  
 Kitchen, R., and Sandin, R. B. The synthesis of 5-methyl-4, 7-thionaphthene-quinone and related compounds. *J. Am. Chem. Soc.* 67:1645-1646. 1945.

Sandin, R. B., and McCormack, W. B. The decomposition of phenyliodoso acetate. *J. Am. Chem. Soc.* 67:2051-2052. 1945.

#### *Department of Civil Engineering*

Hardy, R. M. Discussion to "Soil mechanics as applied to P.F.R.A. problems with special reference to the proposed St. Mary Dam." *Eng. J.* 28:287. 1945.

Morrison, I. F. Discussion to "Soil mechanics as applied to P.F.R.A. problems with special reference to the proposed St. Mary Dam." *Eng. J.* 28:287. 1945.

Hardy, R. M. Discussion to "Application of soil mechanics to the design and maintenance of prairie highways." *Eng. J.* 28:297. 1945.

Morrison, I. F. Discussion to "Application of soil mechanics to the design and maintenance of prairie highways." *Eng. J.* 28:298. 1945.

Hardy, R. M., and D'Appolonia, E. Permanently frozen ground and foundation design. *Eng. J.* 29:4-12. 1946.

Hardy, R. M. Soil sampling and testing for highways and airports. *Roads and Bridges.* 63-66, 113-122. Feb. 1946.

Hardy, R. M. Soil mechanics applied to dams. *Roads and Bridges.* 72, 104-106. Oct. 1945.

Thorssen, L. A. Design of concrete mixes. *Roads and Bridges.* 63-64, 114-118. Jan. 1946.

Thorssen, L. A. Examination and testing of concrete materials. *Roads and Bridges.* 67, 102-108. Feb. 1946.

Morrison, I. F. Mechanics of soil compaction and stabilization. *Roads and Bridges.* 62-68, 106-108. May 1945.

Morrison, I. F. The solution of three-term simultaneous linear equations by the use of submatrices. *Eng. J.* 29:80-83. 1946.

#### *Department of Classics*

Hardy, W. G. Canada: Today and tomorrow. *Tomorrow.* 5(1):5-9. 1945.

#### *Department of Dairying*

Thornton, H. R., and Dunkley, W. L. Dairying—Pioneer in the training of food technologists. *Food in Can.* 5(8):26-32. 1945.

Thornton, H. R. Pasteurizing practised for more than 200 years. *Can. Dairy and Ice Cream J.* 34(9):52. 1945.

Dunkley, W. L., and Wood, F. W. The flavor of butter when manufactured from rancid cream. *Can. Dairy and Ice Cream J.* 34(7):25-28, 62. 1945.

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Staffs of the Dairy Branch, Alberta Department of Agriculture, and the Department of Dairying. Farm cheesemaking. *Joint Series Pub.* 5, pp. 24. 1945.

#### *Department of Education*

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#### *Department of English*

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- Tracy, C. R. Johnson and the art of anecdote. *Univ. Toronto Quart.* 15:86-93. Oct. 1945.
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- Tracy, C. R. Browning and Goldsmith. *Pub. Mod. Languages Assoc.* 61:600. June 1946.

#### *Department of Entomology*

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- Strickland, E. H. Adult Odonata as classroom material. *Ann. Ent. Soc. Am.* 39:28-32. 1946.

#### *Department of Geology*

- Rutherford, R. L. Structures at depth on the plains. *Can. Inst. Min. Met. Bull.* 409. 1946.
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- Warren, P. S. Triassic faunas in the Canadian Rockies. *Am. J. Sci.* 243:480-491. 1945.

#### *Department of History*

- Collins, R. W. Recent trends in Russia. *Can. Mineworker.* 5(3):6-7, 30-31, 33. 1945.

#### *Department of Mathematics*

- Campbell, J. W., and Johns, H. E. Eclipse predictions. *J. Roy. Astron. Soc. Can.* 39:347-354. 1945.
- Keeping, E. S. Estimation and confidence. *Proc. Can. Math. Congr.* 1945.
- Wyman, M. Non-static isotropic solutions of Einstein's field equations. *Proc. Can. Math. Congr.* 1945.

#### *Department of Medicine*

- Hawirko, L., and Sprague, P. H. Treatment of obesity by appetite-depressing drugs. *Can. Med. Assoc. J.* 54:26-29. 1946.
- Watts, E. H. Anaesthesia in the aged. *Can. Med. Assoc. J.* 53:20-24. 1945.
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Rich, C. B. Classification of non-tuberculous chest diseases with special reference to so-called atypical pneumonia. *Can. Med. Assoc. J.* 53:265-274. 1945.

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## EXCERPTS FROM THE REPORTS OF ADMINISTRATIVE OFFICERS

### Report of Dean J. Macdonald of the Faculty of Arts and Science

#### Recommendations for Degrees

The number of students recommended for degrees at the Convocation of May 15th, 1946, is as follows:

For the B.A. degree .....	41
For the B.Sc. degree .....	91
For the B.Com. degree .....	9
For the degree of B.Sc. in Household Economics .....	29
For the degree of B.H.Ec. ....	3

#### Legislation

The most important change under this heading has been the revision of the curricula for the B.A. and the B.Sc. degrees. The courses leading to these degrees have been organized into patterns calculated to give greater cohesion and general cultural value to the student's program as a whole. Another important change has been the setting up of a department of Fine Arts. In this connection six courses in Music have been sanctioned, four of them being operative during this session. Two courses in Art and two in Drama have also been sanctioned. Other

changes effected have been essentially a matter of reorganizing content and changing the names of courses. In the School of Commerce, an important change has been the sanctioning of a fourth year to provide for an Honors degree in Business Administration.

Owing to limited facilities, it was necessary to set a quota on admission to first year pre-Medicine and pre-Dentistry. It was also necessary to refuse admission to a considerable number of civilian applicants who in normal circumstances would be admitted to these courses.

The outstanding feature of the session was the instituting of a special session for first year rehabilitation students, commencing January 4th and continuing until July 31st. This made it possible to save a year for those veterans who were discharged too late to be admitted in September. In the circumstances, the securing of additional instructors was a serious problem and I have to express my appreciation of the prompt and effective manner in which the administration dealt with it. A further serious problem was that of classroom and laboratory space and this, too, was handled in a manner that reflects great credit on those who had to cope with it. More particularly, however, I desire to put on record my appreciation of the attitude and spirit of the regular members of the staff without whose co-operation, especially in the way of readiness to undertake an abnormally heavy teaching load, the conditions incidental to the double session would have proved far more trying than they did.

### **Report of Professor F. G. Winspear, Secretary of the School of Commerce**

The Committee of the School of Commerce has observed with gratification the sincerity and interest with which students discharged from the armed services have renewed their studies. The academic standing of rehabilitation students has not been below the general average.

The increase in registration has necessitated a duplication of courses, and in other respects has resulted in an increase in the teaching load on the academic staff.

During the year a special committee has studied the revision of the curriculum, and as a result thereof substantial changes have been made and are reflected in the 1946-47 calendar. In the main they represent increased emphasis on business administration and other technical aspects of the course, and are designed to offer more specific training in commerce and business. In the result the School has been forced to restrict the number and nature of options which the students may select in cultural courses. The sub-committee has also made recommendations with respect to an optional extension of the course in the field of business administration, to enable students if they so desire to continue their studies for an additional year and obtain an honors degree in business administration. Final conclusions have not so far been determined, however, and when the matter has been exhaustively studied the committee expects to make recommendations to the Faculty of Arts and Science in respect thereto.

## Report of Professor Mabel Patrick, Director of the School of Household Economics

Registration for the degrees of B.Sc. in Household Economics and B.H.Ec. this year was as follows:

First year (including 4 B.H.Ec.) .....	55
Second year (including 3 B.H.Ec.) .....	29
Third year (including 3 B.H.Ec.) .....	31

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115

Of these students there are 12 ex-service women, 9 in the September class and 3 in the January class. These are registered as follows:

First year (including 1 B.H.Ec.) .....	11
Third year .....	1

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12

The students in the January class are taking only one half of the year's work in Household Economics 2 and will complete the work of the course in either their junior or senior year.

One hundred and ten students were enrolled in courses in Household Economics outside the School itself.

The School approved the principle of offering student dietitian training at the Cafeteria and Dining Hall under the Department of Household Economics, so plans have been made to offer this training to two students in 1946-47.

The demand for dietitians and teachers has increased this year. Laboratory facilities in the Department of Household Economics limit the registration to the number now being accepted in the first year.

## Report of Dean R. D. Sinclair of the Faculty of Agriculture

The work of the Faculty of Agriculture, in the University of Alberta may be separated into two main divisions, (1) academic and (2) experimental. For convenience in preparing this report the activities of the Faculty will be subdivided under these headings.

It should be noted however that, in addition to teaching and conducting experimental work, members of the staff of the Faculty of Agriculture engaged in a certain amount of extension work during the year. It is felt that close contact must be maintained with the farm people of Alberta to the end that the results of research may be put into practice as quickly as possible and in order that members of the staff may be kept in touch with problems arising on the farm. Direct contact with farmers has been achieved through addresses at farm meetings, agricultural short courses and field days, and by means of personal interviews. The usual bulletins and circulars have been issued. Radio talks have been given at regular intervals throughout the year, mainly on the Alberta Farm and Home Forum programme—CKUA. Close co-operation was offered by all Departments to the Department of Extension of the University and the Extension Service of the Alberta Department of Agriculture.

### *Academic*

It is anticipated that first year registrations in Agriculture during the 1946-47 academic term will exceed those of the academic year just closed. Unless additional

laboratory and classroom space for Agriculture can be made available an almost impossible situation will develop in connection with the sectioning of certain classes. The problem is particularly acute in the case of second year Soils classes where five or six sections will be required unless laboratory space can be expanded considerably. Increased office space is needed to accommodate those who may be added to the Faculty of Agriculture staff during the coming year and to provide better conditions for certain members of the Dominion Department of Agriculture staff who are stationed at the University of Alberta. While the addition of some temporary buildings would improve the situation considerably, the Faculty of Agriculture trusts that the erection of a Biological Science building will not be too long delayed.

Twenty-one students engaged in agricultural research were registered in the School of Graduate Studies. Of this number three came from the University of Saskatchewan. Nine completed the requirements for the M.Sc. degree during the year. Much valuable assistance in connection with instruction in junior classes was received from graduate students during the academic year.

During the year a six-months Dairy Short Course was offered under a joint arrangement between the Department of Dairying, the Dairy Branch of the Alberta Department of Agriculture, and Canadian Vocational Training. A total of 18 veterans registered for the course. Students with Grade XI standing or better who attained an average of 65% on final examinations were eligible for a diploma while those with lower standing qualified for a certificate of record.

The Faculty of Agriculture co-operated with the Department of Extension in offering three short courses, one for the Land Appraisal Institute, one for Appraisers and Settlement Supervisors of the Veterans' Land Act, and one for Sanitary Inspectors of the Provincial Department of Public Health.

### *Experimental*

Although research in certain departments had to be restricted to some extent owing to the additional teaching load caused by the increased enrolment of students, the investigational work in the Faculty of Agriculture was maintained on an active scale during the year. Several grants were received from commercial organizations and a number of projects were assisted by the Committee on Agricultural Research Grants.

During the year the Professor of Agricultural Engineering took an active part in the work of the National Committee of Agricultural Engineering, serving as Chairman of the National Sub-Committee on Farm Buildings. Much material relating to the construction of farm buildings was assembled and placed at the disposal of the Dominion Architect for study with a view to preparing publications suitable for farm use.

The Department of Animal Science was able to supplement the usual feeding trials with a certain amount of detailed investigational work in the Animal Nutrition Laboratory. One graduate student in Animal Husbandry conducted his research in the University Nutrition Laboratory, concentrating mainly on determining niacin values of cereals grown within the various soil zones of the Province. Another graduate student, working in the Animal Nutrition Laboratory, was concerned with a study of the choline content of grain, hays, and by-products used in livestock and poultry rations. Investigations with swine included a study of



the ration of the brood sow in relation to growth and vitality of the young pigs, a consideration of the optimum levels of vitamins A and D in swine rations, and a comparison of self-feeding and hand-feeding from the standpoint of the influence on carcass quality. The value of urea as a source of protein for milk production was studied further during the year. An investigation was started in connection with the possibility of lowering the cost of beef by means of utilizing maximum amounts of pasture and hay.

The 1945 annual Feeders' Day was held early in June and drew a large attendance of farmers and livestock feeders from various parts of Alberta. The Livestock Pavilion at the University Farm did not provide sufficient seating accommodation for those who wished to hear the lectures and, as a means of serving the increased listening audience, loud speakers were installed for the benefit of those who had to remain outside of the building.

In the Department of Dairying the study of rancidity in milk, cream, and butter was continued. The effect of cream neutralization temperatures on butter grades is being studied jointly with the Dairy Branch, Alberta Department of Agriculture. Similar joint studies have been made on the extraneous matter content of Alberta butter and cheese and on the effect of storage temperature on the acidity of grading samples of cream.

Experiments in connection with the use of D.D.T. as an insecticide for use in cheese factories and dwellings were carried out in co-operation with the Provincial Dairy Commissioner and the City of Edmonton. Excellent results were secured in the control of flies, bed bugs, fleas, and cockroaches.

The acquisition of approximately 100 acres of land from the City of Edmonton during the past year will make it possible to plan anew certain aspects of the work in horticulture, field crops, and forage crops in the Department of Plant Science. The research programme of this Department continued to receive assistance during the year from the National Research Council and the work commenced two years ago under the sponsorship of the Committee on Agricultural Research Grants was expanded with the installation of a modern electrophoresis apparatus. As far as is known it is the only one of its kind in Canada. Research on plant proteins will be expanded during the year.

Some promising selections of barley have been subjected to preliminary quality testing and soft wheat testing work was expanded in the Brooks area. The production of Titan barley is now on a commercial scale and thousands of bushels of registered and certified seed are available in the province.

The Canadian Seed Growers again financed work on testing vegetable seeds. Other horticultural work included a continued study of fruit varieties and the naming of seventeen of the best gladiolus varieties developed at the University of Alberta during recent years.

Research in the control of plant diseases was continued and a study was made of the control of weeds by chemicals. Work with alfalfa, clovers, and peas was continued and among the grasses showing promise was a new strain of fescue especially adapted for lawns.

Visitors' Day was held again with the object of allowing people to inspect the field trials and the work of the Plant Science Department in general and in spite of bad weather over one hundred visitors attended.



Soil surveys were carried out during the year as a co-operative project by the Department of Soils, the Alberta Research Council, and the Dominion Department of Agriculture. In addition to exploratory trips, approximately 2,000,000 acres were covered, consisting of 750,000 acres on regular survey (Peace Hills), 750,000 acres between the Peace and Smoky Rivers and adjacent to Tagent and Prestville for purposes of soldier settlement, and 58,000 acres near Ronalane and Scope for extension of irrigation. Difficulty in securing properly qualified staff for soil survey work continued to be a problem.

The regular fertilizer and plot experiments were carried out, though on a somewhat reduced scale. Fifteen years of continuous results from the Breton and Edmonton plots have been secured and summarized. The demands for services by farmers and gardeners continued to increase and added greatly to the work of staff members.

The usual soil research activities were continued chiefly along the lines of soil sterilization, legume inoculation, and studies on soil sulphur deficiencies.

In conclusion it may be stated that the work of the Faculty of Agriculture, in common with other Faculties in the University, expanded considerably during the year. All members of the staff co-operated willingly in the task of giving returned service men the best training possible and in carrying out their other responsibilities in relation to teaching, research, and extension.

### Report of Dean R. S. L. Wilson of the Faculty of Applied Science

The number of students in this Faculty is 654, compared with 348 last year. The distribution among years and departments is:

First year .....			361
	Vets.	Civ.	
Sept. 1945 .....	165	48	
Partial .....	2		
Jan. 1946 .....	138	8	
Second year .....			136
Cemical .....	8	15	
Civil .....	16	27	
Electrical .....	23	30	
Mining .....	9	8	
Third year .....			73
Chemical .....	5	8	
Civil .....	3	23	
Electrical .....	6	19	
Mining .....	4	2	
Engineering Physics .....		3	
Fourth year .....			84
Chemical .....	1	27	
Civil .....	4	14	
Electrical .....	9	19	
Mining .....	1	6	
Engineering Physics .....		3	
	394	260	654

Admission of civilian matriculants to first year was limited to those having not less than 75% average general standing. A few of those asked to delay their entrance to the University in September were admitted with the January special first year for veterans. Eighty-nine veterans returned to enter second, third and fourth years.

Academic progress of students is about as usual and generally satisfactory.

This faculty sustained a severe loss soon after the opening of the session in the sudden and untimely death of Professor Edward H. Boomer. He was largely responsible for the recent development of chemical engineering towards departmental status and was working on a plan for its physical establishment up to the time of his death.

For the first time since before the war the Industrial Tour for senior students in Chemical and Mining engineering was resumed this year. It is now necessary to separate the two kinds of students involved because of the numbers. In future, Chemical engineering and Mining engineering students will travel in alternate years.

Employment opportunities for graduates are fairly plentiful. For undergraduates there is available a good variety of seasonal occupations during the summer. Civilians may encounter some difficulty because of the preference for veterans by many employers.

Required teaching staff, lecture rooms, laboratory space and equipment for the greatly increased number of students comprise a problem of major proportions. All departments serving students in Applied Science need greatly expanded facilities. During the current session the staff have been carrying serious overloads to such an extent that in some cases health is endangered. Repetition of laboratory instruction has been necessary to an extraordinary and undesirable degree because of lack of space and equipment. The normal growth and development of research and post-graduate instruction is almost completely prevented although more students are seeking post-graduate courses.

Members of the teaching staff ordinarily take a large share of administration work on standing and special committees. The amount of such work is very large at present and will continue so for another four or five years because of the great number of ex-servicemen. The heavy proportion of junior to experienced staff should be adjusted as rapidly as possible in order to maintain some reasonable degree of efficiency.

The usual acknowledgements are due to members of the staff for their services throughout the year.

### **Report of Dean W. Scott Hamilton of the Faculty of Dentistry**

Because of the accelerated war programme the class which would have graduated at this time completed its course of training in December, 1944. An additional class was also graduated in August, 1945. Therefore, during the session 1945-46 there was no senior class in this faculty. An account of the time saved by the accelerated programme was included in the President's report at the January 1945 Convocation.

We still have two classes which began their courses during the war and because of regulations in force at the time are rather limited in numbers. The first year class of the session just closed is filled to capacity and there were a number of applicants who had to be rejected because of lack of accommodation.

In pre-dentistry in this university we have in the September and January classes a total of about 90 students, and an unknown number in Manitoba, Saskatchewan and British Columbia. It would appear that many qualified students will have to be rejected in September of this year.

This, however, is unavoidable, for at the present time there are more applicants than the profession can accommodate and there is a limit to the amount of clinical material which this city can supply for student instruction. It is our intention to accept as many as possible but only to the point where we are sure that the quality of instruction will not deteriorate.

Future prospects for teachers in our faculty look very bright. At the present time there are five, who served in the Canadian Dental Corps, taking graduate work in American universities, and we hope during the next year to have others.

These will provide heads for our various departments. In addition a number of bright young men from the Corps have established practices in Edmonton and can be used as instructors.

### **Report of Dean M. E. Lazerte of the Faculty of Education**

Although the Faculty of Education nominally assumed control of the former Provincial Normal Schools on April 1st, 1945, it did not become responsible directly for all teacher training until September, 1945, the beginning of the 1945-46 academic session. In September, therefore, the Faculty of Education had a sudden spurt in growth. The staff increased from three to 28, the student enrolment from about 100 to 800.

Staff and students alike were greatly shocked and deeply grieved when Mr. Manning, Director of the Calgary Branch of the Faculty, died very unexpectedly in February. Mr. Manning was an excellent teacher and an able administrator. His work is being done temporarily by Dr. C. Sansom, who was appointed Acting Director of the Calgary Branch of the Faculty for the period March 1st - June 30th, 1946.

In the Calgary Branch of the Faculty of Education the enrolment is slightly less than twenty-five per cent of the enrolment at Edmonton in spite of the fact that three programmes of study are there available: the War Emergency, the first year of the two-year, and the B.Ed. in Industrial Arts. These relative enrolments at the two centers are not likely to change greatly during the next few years.

The teacher-shortage resulting from the war has necessitated the continuance of the War Emergency training programmes. Two programmes were offered during the current year, one of seven and another of four and one-half months' duration. The requirements for entrance to these two programmes were too low and many students without matriculation standing were permitted to register. In future only fully matriculated students will be admitted to any training programme.

Throughout the year the Faculty of Education was without adequate classroom space. Observation and practice teaching facilities were restricted. All basement rooms are now completed and a more flexible timetable can be arranged.

Three major problems confront the Faculty of Education. First, it is difficult to attract to the profession a sufficient number of capable students with the personality and character traits that are rather essential to the successful teacher.

Second, there are so many students registered in the practice teaching course, and the number of demonstrators is so limited, that inadequate provision is being made for practical classroom work. A special study of this problem will be made early next session. Third, owing to the fact that the Faculty of Education was one of the last faculties or schools to be organized on this campus, it has always been difficult to arrange a satisfactory sessional timetable. The timetable of the Faculty of Arts and Science holds a priority that makes it impossible to devise satisfactory programmes for many Faculty of Education students. It is suggested that there be separate Education sections in subjects such as English 2, History 2, French 2, Math. 40 and other non-laboratory courses which are most commonly selected as options by B.Ed. candidates. This sectioning should permit the Faculty of Education to arrange a timetable that meets the needs of most students and it would make possible a much more effective programme of observation and practice teaching, one that is not broken every hour or two by requirements of a timetable designed before one major student group merited recognition.

The Faculty of Education is housed in the former Normal School. The furnishing and maintenance of this building are the responsibility of the Department of Public Works. I take this opportunity to say that all officials of the Department of Public Works and their staffs, including the maintenance and caretaking staff, have been very helpful and co-operative. The Faculty of Education has necessarily requisitioned very often for supplies and assistance. I am pleased to report that all requests have received careful, considerate attention. Personally I appreciate very much the help received from the Government Department with which we are so closely associated.

### **Report of Professor G. H. Steer, Acting Dean of the Faculty of Law**

#### *Teaching Staff*

The University was very fortunate in obtaining the services of Mr. W. F. Bowker, who gave his full time throughout the session to teaching and whose work has been extremely efficient and was received by both the students and his fellow teachers with the greatest satisfaction. The courses which were not taught by Mr. Bowker were taught by practising barristers who, as has been the case throughout the history of the school, have done excellent work under difficult conditions. The Law School is greatly indebted to them. The instructors are: L. Y. Cairns, K.C.; E. W. S. Kane, K.C.; R. Martland, K.C.; C. W. Clement, K.C.; F. Newson, G. W. Auxier, A. T. McLean, A. Smith.

It is hoped to have a full-time staff of three by next session. This will leave only a few courses to be given by part-time instructors.

#### *Courses Given*

All courses for every year were given and in addition moot court arguments (a valuable part of legal training) were resumed after a year's lapse.

In addition it was necessary to give certain courses (totalling 10 hours a week) which are normally given only in alternate years. Three students had enlisted early in the war after completing second year. They required the courses not normally given this year. A request was made to the part-time instructors to give the courses to those three students and they all agreed to do so. The result is that these students will be graduated at the coming convocation instead of being



compelled to wait a year. This is the first year in the history of the Law School in which all the courses on the curriculum have been given in one year.

### *Alberta Law Quarterly*

The last issue was published in June, 1945, by Dr. MacIntyre from Sackville, N.B. This was the first issue published since June, 1944. When the present session opened there was in existence no machinery for publication and it was impossible for the Faculty to carry it on. A final decision has not yet been made as to whether publication should be resumed.

### *Calendar Changes*

None was made in the law course but an amendment was made in the Calendar effective next session that all students taking law be required to take British Constitutional History (History 57) and Canadian Constitutional History (History 58). It is considered that this requirement will raise the general standard of education of the graduating students.

### *Law Society*

The relations of the Faculty with the Educational Committee of the Benchers and with the Law Society as a whole continued to be of the best.

### *Employment of Graduates*

A large number who were graduated in recent years and enlisted before completing their articles are now discharged. It appears that these men and this year's graduating class as well will have no difficulty in being placed. There is a need of young lawyers both in general practice and in various businesses and government administrative positions. The number of openings in work of this kind will doubtless continue to increase as it has in recent years.

### *Law Library.*

Many publications which had remained unbound for several years were bound and all legal journals are now almost complete to date. The students made great use of the text books and digests. If enrolment next session is as large as expected a subsidiary library will be needed. The problem of preventing books from being kept out of the library for longer periods than is permitted has not been wholly solved.

### *Conclusion*

Mention should be made of the work done this year by the students. Three out of four are veterans. The three services are about equally represented. A good proportion were in action. These men came back after two, three, four and five years away from study. They have worked very hard, shown great interest, and a most mature and healthy attitude, a genuine anxiety to do well and their work is of a high calibre.

## **Report of Dean J. J. Ower of the Faculty of Medicine**

*Nursing.*—Miss M. L. McCulla, Acting Director

The classroom, library and office facilities of the School of Nursing have been enlarged giving much needed space for teaching and counselling of students.

More classroom space will be required next fall when the course in Hospital Teaching and Supervision is to be started.

Miss Helen E. Penhale, at present on the Faculty of Nursing Education, University of Western Ontario, has been appointed the new Director of the School of Nursing. Her duties will commence August 1st. The course in Hospital Teaching and Supervision is a definite need in preparation of individuals to teach and supervise nursing education in training-schools. The Public Health Nursing course will be carried on as before.

The Advanced Course in Practical Obstetrics was again in progress for the first three months of the fall term. The course is to be lengthened to four months which will make the course less intensive. It is felt that the students would benefit from having the same material spread over a little longer period of time. Mrs. Barbara Eben, Sessional Instructor, was in charge of this group. Four students were accepted for the course and received their certificates in January. This course arouses interest in many parts of Canada and the students themselves feel most enthusiastic about this project. It has enabled them to undertake their duties and responsibilities with confidence and ability.

An Institute in Industrial Nursing was held in September. This Institute was sponsored by the Alberta Association of Registered Nurses, under whose auspices it was held. Financial aid was given through the medium of the Federal grant before its withdrawal. The Institute was under the direction of the Acting Director, School of Nursing, University of Alberta. The nurses of Alberta were very fortunate to secure the services of an outstanding leader in Industrial Nursing in the person of Miss Heide Kenriksen, Industrial Nursing Consultant for the Minnesota State Department of Health and part-time Lecturer at the University of Minnesota. A week of instruction was offered in both Edmonton and Calgary.

No other short courses or Summer School sessions were offered this year under the auspices of the Alberta Association of Registered Nurses because the Federal Government grant to the Association has been withdrawn.

#### *Pharmacy.*—Dr. M. J. Huston

Although the degree course in pharmacy has been established as the minimum college prerequisite to practise pharmacy in Alberta, the diploma course has been continued for the benefit of candidates who have completed apprenticeship under the old system, or who entered military service before completing apprenticeship. Of the enrolment of 74 students, 63 were in the degree course. In addition to the regular classes in Pharmacy, lectures in *Materia Medica* were again given in the University Hospital to two classes of nurses, and a series of discussions was presented in the Therapeutics 53 course.

In January, 1946, Dr. A. W. Matthews resigned his position as Director of the School of Pharmacy to accept a position with the United Rexall Drug Company. Dr. Matthews had been a member of the teaching staff of the School of Pharmacy since 1922 and became Director in 1942. During that time he contributed much to the advance of Pharmacy in Alberta and in Canada, and he will be greatly missed in University circles.

The project of refitting Arts 405 as a dispensing laboratory is proceeding. Eight new dispensing units have been completed by the Works Department and



at least another eight will be ready for the 1946-47 session. These units are portable and will be moved when new quarters are available,

The School of Pharmacy again organized a two-day Refresher Course in conjunction with the annual meeting of the Alberta Pharmaceutical Association.

### *Medicine*

The opening of the 1945-46 university session found the medical faculty with the first, second and third years of this course back on the regular time schedule, except that this session the medical classes opened two weeks in advance of those in the other faculties. Deceleration had resulted in the loss of a class (fourth year) but from October to January, on account of the lengthening of the final year (fifth) in the new course to a 12-months hospital internship, there occurred the unique phenomenon of two fifth years being taught synchronously.

The outstanding event of this session would seem to be the special convocation on January 5th, 1946, when 22 medical students, all enlisted, were graduated and the honorary degree of Doctor of Laws was conferred upon Dr. Allan C. Rankin, who had retired from the deanship at the end of August, 1945.

Of the accelerated programme there now remains but one class—the present fifth year, most of whom were enlisted in 1944 but who were released from the army in mid-April of this year. The intention is to graduate them in the first week of October after which they will be immediately available for graduate internships in needy hospitals. As indicated above there will be no final year to graduate in 1947.

The cessation of hostilities resulted in the gradual return of the 20 or more members of the medical staff absent in the active service forces widely strewn throughout the world. Happily they have all returned safely and are back in active teaching again.

A number of medical students who had broken their courses to enlist were with one or two exceptions able to secure discharge in time to fit into their respective places in the course without serious handicap. The distribution of these returned students in the various years is as follows:

First year .....	12 men
Second year .....	7 men, 1 woman
Third year .....	2 men

It will be noted that a considerably larger number of returned soldiers intending to enter Medicine were at the pre-medical course level, especially the first pre-medical year, and that the strain on the quota into the first year of Medicine will not be felt until the autumn of 1947. The weight of increased teaching within the faculty during the past session has been borne by those pre-clinical departments, a large proportion of whose students come from other faculties to take courses conjointly with medical students.

Some improvement in measures taken to protect the health of students was achieved by the introduction this session of annual compulsory examinations of all medical students for evidences of tuberculosis.

The Medical Undergraduate Society this session has had a very strong executive and the relationship between staff and students have been very good at all times.

An assessment of the condition of the teaching within the faculty at the present time would seem to be something as follows:

The cessation of the continuous teaching of the accelerated sessions and the return to staff duty of a group of active young graduates has greatly lessened the load of the older teachers, especially in the clinical departments who found the attempt to teach and at the same time satisfy the medical needs of a greatly increased clientele very exhausting and, in some cases, deleterious to their health. These young staff members, whose horizons have been very appreciably widened by their professional and other experiences on active service, are very keen and, if properly handled, will transfuse the organization into a high state of efficiency. The Board of Governors have met this challenge by providing generous opportunities for research through the medium of the establishment of a medical research foundation within the faculty. A faculty committee has been appointed to survey the field of profitable research and to interest especially the younger staff and graduate students therein. Certain projects are already underway.

The annual refresher course with a very comprehensive programme is in progress at the moment. Further in this connection it may be stated that a scheme of post-graduate teaching and training in university departments and in the affiliated city hospitals is being carefully planned and developed by a special faculty committee.

Space here, as with sister faculties, is the universal problem of faculty activities but it is hoped that this will be gradually overcome and improved facilities will shortly be available.

The medical section of the Alumni Association has recently become very active and a sustained attempt is being made by its executive to stimulate in graduates a concrete interest in the problems of the university and in particular the Medical School.

**Report of Dean J. Macdonald, Chairman of the School of Graduate Studies**

During the academic year, 1945-46, 101 students were registered in the School of Graduate Studies.

The distribution of students, according to degrees sought, has been as follows:

	Men	Women	Total
Master of Arts .....	18	6	24
M.A. in Education .....	1		1
Master of Science .....	20		20
Master of Science (Agriculture) .....	21		21
Master of Science (Applied Science) .....	14		14
Master of Education .....	17	4	21
	—	—	—
	91	10	101

In addition, 24 graduates (14 men and 10 women) were registered as special graduate students.

These figures represent a substantial increase over the figures for last season, when the total registration was 72. The main reason for the increase is the very considerable number of ex-service personnel who are proceeding to higher degrees with the support of the Department of Veterans' Affairs.

The distribution of candidates according to departments has been as follows:

Animal Science .....	5	Geology .....	4
Applied Science .....	14	Philosophy .....	4
Biochemistry .....	2	Plant Science .....	12
Chemistry .....	11	Political Economy .....	8
Education .....	22	Physics .....	3
English .....	6	Soils .....	4
History .....	6		

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### Report of the Director of Rehabilitation Courses, Professor E. H. Strickland

#### *Enrolment in Regular Degree Courses*

An important feature of the student enrolment for the 1945-46 session was the large number of student veterans. They were distributed as follows:

	Sept. 1945	Jan. 1946	Total
Arts and Science .....	320	224	544
Applied Science .....	256	138	394
Education .....	136	51	187
Agriculture .....	76	33	109
Medicine .....	60	.....	60
Law .....	30	.....	30
Dentistry .....	13	.....	13
Graduate School .....	29	.....	29
Totals .....	920	446	1366

To this total can be added 77 students who entered the Summer School in 1945, and 18 who attended a short course in Dairying, which would bring the grand total to 1,461.

#### *Standard of Instruction*

Despite the abnormally heavy teaching load, entailing increased hours of instruction for nearly all of the staff in every Faculty, the general quality of instruction suffered very little as a result of this large influx of students.

The only serious difficulty arose from the inability of publishing houses to supply an adequate number of text-books on subject-matter for which there is a Continent-wide demand of unprecedented intensity.

#### *Quality of Students*

The academic standing of D.V.A. students admitted to this University has been very satisfactory. It is certainly equal to that of recent High School graduates who have entered the University by the normal procedure. To this must be added the fact that D.V.A. students, as a whole, are mature in their outlook and they reveal a determination to make the very best use of their present educational opportunities.

No general concessions with regard to subject-matter or to required academic standing have been made to rehabilitation students. On graduation, their respective degrees will be, in all respects, comparable with those of other graduates of this University.

### *Tutorial Assistance*

Prior to the 1945-46 session, which opened in September, 1945, a two-week period of preparatory tutorial instruction in Mathematics and Languages was offered to all D.V.A. students who felt that this would be desirable as a "refresher" before entering the regular course. About 160 students took advantage of this offer. Many have since declared that, but for this, they doubt whether they would have been able to resume their studies in the regular courses with much prospect of success. Their only regret was that it was not of a longer duration. The Departments concerned, also, considered that a three-week period, such as was given prior to the January 1946 term, gave the students a better opportunity to review all of the Grade XII subject matter which was prerequisite to resuming study in University courses.

### *Teaching Accommodation*

The influx of about 1,000 students additional to the normal enrolment in September, 1945, did not seriously tax the accommodation resources of the University, though it necessitated a number of adjustments, particularly in Departments such as Chemistry in which, with a normal daily programme, the limit of accommodation had already been nearly reached.

Quotas for admission had to be enforced in certain Faculties and Schools with limited laboratory facilities, but these did not operate to the detriment of rehabilitation students. None have been refused admission to the University on the grounds of shortage of accommodation, though this was, unfortunately, unavoidable in the case of certain other applicants.

Indications were to the effect that some 800 to 1,000 rehabilitation students proposed to apply for admission in the year which commenced in January, 1946. This number would have overtaxed the teaching as well as the living accommodation in and near the University. Plans were, therefore, made to take advantage of an offer of temporary accommodation in the U.S. Airbase for instructional purposes, as well as for the living accommodation of all new students in the Faculty of Applied Science and in the School of Commerce.

Unavoidable delays, in so far as the University was concerned, prevented this plan being put into operation by the date of enrolment in January. On this date, however, only 446 of the anticipated 800 to 1,000 prospective D.V.A. students presented themselves for registration. For this reason, the proposed transfer to the Air Base was no longer an unavoidable necessity.

The situation was met, largely, by instituting evening laboratories in certain Departments and by lengthening the periods of afternoon instruction in others in order that laboratory periods could be repeated.

### *Living Accommodation*

1. Married Students.—The University was faced with an unprecedented problem in that some 35 per cent of the rehabilitation students are married. Many have "overseas" wives, and about 50 per cent have children. Though it was clear that the University, as such, had no legal responsibility for seeing that these families were housed, the moral responsibility was incontestible. The solution was to maintain a close liaison with authorities who were in a position to arrange accommodation for these 450 families of married out-of-town students and to press continually for action.

It was soon established that, of these married students, a maximum of about 100 might be able to find accommodation through the usual channels in Edmonton. With the prevailing rentals, however, very few would be able to remain in such rooms for many months, since these rentals were entirely out of proportion to the percentage of their allowances which could be devoted to this purpose.

The only alternatives open to the surplus were either that they forego a University education or that they leave their families elsewhere and find accommodation, as single men, in Edmonton. Neither course meets the minimum requirements of the Federal Government promise for rehabilitation by education.

The solution appeared to be in sight when the Provincial Government financed a City project for bringing sufficient prefabricated U.S. huts from Dawson Creek for conversion to about 400 suites, of which it was understood that 100 would be made available for married D.V.A. University students in September, 1945, 50 in January, 1946, and a final 100 in September, 1946.

This arrangement, which was made prior to VJ-Day, appeared to be adequate for handling all of the most pressing needs which it was anticipated would develop in connection with housing the families of married students. Serious shortages in the buildings themselves, delays in conversion, the incidence of VJ-Day at an unexpectedly early date, and the Federal Government policy of rapid demobilisation, seriously upset all calculations. No suites were available by September, 1946. To meet this situation, prospective renters were housed temporarily in the University rink.

By January, 1946, however, 107 students' families were housed in these suites. At this time, the City informed us that no more could be made available, at any time, for this purpose. In the meantime a number of married men had found accommodation, usually of a temporary nature since rentals were in excess of their allowances for this purpose, and only 52 had been forced to leave their families elsewhere. There the matter stands, with an anticipated influx of some 400 married students in June and September, 1946. Efforts are still being made to accommodate them with Government assistance. If these fail, it is doubtful whether more than about a dozen will be able to find any accommodation for their families in Edmonton at a rental which will permit them to attend the University.

2. Single Students.—In September, 1946, all were able to find accommodation in the City of Edmonton. In January, 1946, when there were prospects of 800 to 1,000 additional students applying for admission, local facilities would have been inadequate. The University planned, therefore, to house the excess at the U.S. Air Base and, in the meantime, to accommodate them in "double-decked" sleeping quarters in the University residences. The unexpectedly small registration rendered utilization of the U.S. Air Base unnecessary since it was possible for everyone to find accommodation elsewhere. In so doing, however, much of the City accommodation has been exhausted, and it is doubtful where many more than 25 per cent of the estimated 1,500 rehabilitation students who expect to enrol in September, 1946, will be able to do so unless, in the meantime, Government assisted accommodation has been made available for them. Plans for so doing appear to be receiving favourable consideration both in Ottawa and in Edmonton.



## **Report of the Librarian, Miss Marjorie Sherlock**

The past year has been a most eventful one for the Library. In September the resignation of Mr. D. E. Cameron brought to a close a long period of scholarly administration, notable for the wise and careful building-up of the book collection from its early beginnings to its present well-balanced state. Mr. Cameron will be greatly missed, by the students, by his colleagues of the Faculty, and by the general public throughout the province. His wide scholarship and intimate knowledge of books, and his immense kindliness and interest in people made him counsellor and friend as well as Librarian, and his departure from the Library leaves a gap which can never be wholly filled.

### *Staff*

In September also, Mr. D. C. Appelt, Chief Cataloguer, left the University to assume his duties as Librarian at the University of Saskatchewan. He has been much missed, and the good wishes of the staff for success in his new position go with him. His place as Chief Cataloguer has been taken by Miss Helen Farquharson, formerly of Queen's University Library. Other additions to the staff are Miss Marion Nancekivell, who came to us from the University of Saskatchewan Library; Mrs. Lillian Gue, typist and assistant in the Cataloguing Department; Miss Emily Clever and Miss M. I. Grant, Education Librarians (Edmonton and Calgary), formerly librarians in the Provincial Normal Schools; and four clerical assistants, two in the Main Library and two in the Education Library (Edmonton).

### *Quarters*

The problem of space to accommodate readers and books has become acute. With a registration of over 3,300 students this past year, the total number of seats in the main and various departmental reading-rooms, including the Medical and Education libraries, is 285. The approaching Fall term will increase the congestion. Work rooms for the staff are crowded and inadequate, and the preparation of periodicals for binding and the entire work of extra-mural loans are carried on under most difficult conditions at small tables set between rows of book shelves in the stack-room. All these conditions emphasize the need for a new library building.

A series of conferences was held in October with Mr. A. S. Mathers, consulting architect for the University, and plans were drawn up and completed for a new library building, which will also house the Medical and Extension Libraries.

The taking-over by the University of the teacher-training work of the province involved the inclusion in the University Library system of the former Normal School libraries in Edmonton and Calgary. These had been in temporary quarters during the war, with many of their books in storage, and the move back into their own buildings involved the packing and unpacking, the moving and shelving of thousands of volumes in the short period between the end of Summer School and the beginning of the Fall term on September 18.

To meet the heavy demand for seating space two additional reading rooms were set up, one in the Arts Building and one in the Education Building, each seating about 50 readers, and supervised by student assistants. Study tables and chairs were also placed in the Men's and Women's Common rooms, and have been used continuously.



The crowding in the Law library, where it suddenly became necessary to accommodate 40 readers, forced the removal of all standing stacks and the addition of 10 extra tables and 30 chairs. This meant the moving of approximately 3,000 volumes to a room under Convocation Hall, where temporary shelves were built for them. Additional shelves have also been erected in the Main stack-room and are already more than half filled.

#### *Cataloguing and Orders*

The work of this department has been carried out under considerable difficulties this past year. During the first six months Mr. Appelt assumed many of the Librarian's duties, when Mr. Cameron's work with ex-service personnel became overwhelmingly heavy. For this reason a very considerable back-log of ordering and cataloguing remained for the new staff to deal with in October. The last six months saw a completely new staff in the department, and to the task of adjustment and reorganization was added the increased work resulting from the heavy registration, and the addition of the Education Libraries and several new teaching departments.

During the six months from October 1, 1945, to March 31, 1946, the department ordered 1,552 volumes, accessioned 3,186 volumes, catalogued 2,576 volumes, and labelled 1,988 volumes. In addition the current file of orders was brought up to date; book pockets and cards were put in all books in the Chemistry and Nursing reading rooms, and the recataloguing of the Education Library (Edmonton) has been begun. Plans have been made to have Miss Farquharson and an assistant spend two months this summer in Calgary to recatalogue the Education Library there.

#### *Reference and Circulation*

A wide variety of reference questions has been answered, bibliographies prepared and material provided on many subjects for students and faculty. A vertical file for pamphlet material has been started and indexed by subject. Over 800 current periodicals were received and recorded; back files of journals built up by ordering missing volumes and numbers; and 608 volumes prepared for binding.

The circulation of Reserve and stack books has been unusually heavy since October. Figures for the six months, October 1 to March 31, for the Main Library are: Circulation from the stacks for home use, 6,536; reserve books for overnight use, 7,365; reserve books for use in the Library, 18,254. The Medical and Education libraries have also had a record circulation. Extramural loans totalling 684 were sent out by mail to 179 outside students during the year, and 365 volumes from the Medical library to medical practitioners in the province. Inter-library loans: Lent to other libraries, 37 volumes; borrowed from other libraries, 79 volumes.

#### *Stock of Books*

During the year 2,167 volumes were added by purchase and 293 by gift, giving us at March 31, 1946, a total of 83,138 accessioned volumes. In addition there are about 13,000 volumes in the Education Library (Edmonton) and some 10,000 volumes in the Education Library (Calgary) which have yet to be catalogued, giving a total in the University Library system of approximately 106,000 volumes.

The Librarian wishes to thank all the members of the Library staff for their loyalty and patience through this difficult period of adjustment, and for their unflinching enthusiasm and devotion which have made it possible to carry on the work of the Library at a high level in spite of difficulties.

### **Report of the Provost, Dr. P. S. Warren**

In submitting a report on student activities for the year, it is my intention to touch on certain aspects only, but this should suffice to give a general over-all picture of the student body for the year.

#### *General Morale of the Student Body*

The general morale of the student body was good, but on the quiet side and it suffered from a lack of strong leadership. The effect of the returned men was felt in that most of this group were very serious about their work and did not participate to any great extent in University undergraduate functions. They were, on the whole, the older men on the campus and were mostly first year men, while the senior students were younger and were unable to give the returned men the necessary leadership in student activities. Another year will probably see the returned men taking a much more active interest in student affairs.

#### *Student Activities of a Social Nature*

The banquet and dance held in the Macdonald Hotel is still the most popular form of social amusement among the undergraduates. This is varied only as a banquet without a dance, and a dance without a banquet. Some of the larger student organizations chose the drill hall for a dance as the dancing floor of the Macdonald is quite limited. The drill hall is not a good place for a large dance as various facilities are strictly limited and the acoustic properties are poor. It should be used only for student rallies, etc. The large dances are also difficult to control in regard to decorum. It is proposed that for next year an attempt will be made to break down the large organizations into smaller units for such social entertainment. It is also proposed to place more responsibility for decorum on the organization responsible for the entertainment.

#### *Student Sporting Activities*

Student sporting activities returned to a pre-war level and will, undoubtedly, continue to advance under the strong leadership of Mr. Van Vliet, Professor of Physical Education. Intercollegiate competition was provided in rugby, hockey, basketball and various gymnasium activities, in which our University took their fair share of honours. Curling was introduced on the campus and the club was remarkably successful. Intra-mural sport will still require careful nursing. The Men's Athletic Board and the Women's Athletic Board will presently petition for amalgamation, so all sporting activities on the campus will come under one management.

#### *Student Literary Activities*

Under the heading, Literary Activities, are included Music, Drama, Debating, etc. The results were especially gratifying in some clubs where strong leadership was in evidence. The Music and Dramatic Societies were especially vigorous, with the Mixed Chorus under the leadership of Mr. Gordon Clark providing a high standard of excellence. The introduction of an Intercollegiate Dramatic Contest,

sponsored by our University, was an unqualified success and spoke well for the initiative and zeal of the Dramatic Society. There is room for much improvement in other "literary" activities.

### *Students in Residence*

The return of the student residences, Athabaska, Assiniboia and Pembina Halls, to University control provided accommodation for a limited number of students. The University provided a warden for each residence, which proved a useful innovation and was very successful. Considerable confusion resulted at first as most of the staff were new and none of the students were accustomed to residential life. These matters were soon put to rights, but overcrowding was prevalent throughout the year. It is suggested for the coming year that the number of students accommodated in the residences should be controlled by the number that may be accommodated at the tables in the dining rooms, without the use of the gymnasium.

The conduct of most of the students in residence was exemplary. A few found difficulty in fitting into residential life. Some of these left on their own accord and one was put out. While it is essential that the largest number of students in residence should be first year students, it is essential that a sufficient number of more senior students, with residence experience, should be admitted to provide sufficient control and leadership to the new members. The senior students admitted may well be chosen through the advice of the wardens.

### *Moral Tone of the Student Body*

It is probably safe to make the statement that the great majority of the students at the University are of a high moral calibre and it is also safe to state that there are a few whose morals are definitely lax. The war has resulted in a general loosening of moral fibre, but students have been with us at all times whose moral fibre has been weak. There is undoubtedly a certain amount of heavy drinking among the student body, but it is certainly not in evidence on the campus. Minor drinking is undoubtedly indulged in by many students and, unfortunately, is apt to take the form of the flask in the hip pocket at various student functions. This is objectionable, but exceedingly difficult to eradicate. It is kept very closely under cover. Among so many of the younger generation, it is considered the "thing to do".

Petty thieving is always with us both in the residences and in classroom buildings. This year the stealing of overcoats has been epidemic and it has been pretty well proved that some of the thieving is the work of students. The overcoats are being sold at second-hand stores and are being reclaimed by the students who can prove their article. This type of thieving is partly the result of laxity on the part of individuals who will not bother to put a name or distinguishing mark on their coats.

Sexual problems are still with us and are probably accentuated due to war conditions. Promiscuity is undoubtedly confined to a very small proportion of students, but there is always evidence of its presence.

## **Report of the Director of Medical Services, Dr. J. W. Scott**

The increased registration has increased the activities of the Student Medical Services with corresponding increases in expenditures in hospital and infirmary services.

However, this has been a normal year so far as any communicable disease is concerned, and in spite of the somewhat congested housing of students throughout the city, we have had no serious outbreak or spread of communicable diseases.

The examination of new students was carried out in September and January. The scheme which we have used in the past year of obtaining assistance from the interns has worked satisfactorily.

Dr. M. E. Geissinger, who has rendered valuable service as resident physician during the past session, finds it necessary to give up this work. We hope to be able to appoint someone to replace him before September. Dr. M. M. Cantor will act as resident physician during the summer school. During the past session Dr. M. Hutton has given valuable services as consultant to women students in gynecology. She carried out this service in the Infirmary and we found it of great value. It is hoped that we may be able to add a similar service in the field of psychiatry as soon as we can find a suitable person. Problems frequently arise in mental and nervous adjustments among the students. The availability of a consultant trained in this special field would be of value.

Miss Aileen Revell has given her usual excellent services as nurse in charge of the Infirmary during the past year. We have employed Mrs. Morrison to assist her with nursing. Mrs. Morrison has resigned, as from May 1st. We hope to replace her shortly.

During the year there was carried out a chest X-ray survey by Dr. Davison of the Tuberculosis Service of the Department of Health. We hope that this will be repeated next year on a larger scale. We would like if possible, to have this service carried out on all new students at the time of their freshmen examinations.

## **Report of the Officer Commanding, Canadian Officers' Training Corps, Lt.-Col. F. Owen**

In October, 1945, Lt.-Col P. S. Warren retired from the command of the C.O.T.C. to take over the duties of Provost. Lt.-Col. F. Owen succeeded to the command.

The following members of the staff also retired because of pressure of academic duty: Maj. W. G. Hardy, Capt. C. Tracy, Capt. W. Johns, Capt. W. Broadfoot, Lieut. G. Elliott.

The strength of the unit during 1945-46 was 200 all ranks. There have been 18 officers, all of them students with the exception of the Officer Commanding and the Paymaster, Maj. A. West.

Nine of the Platoon Commanders were Engineering students, of whom eight are graduating.

The following former members of the unit, who have returned from active service to the University to complete or continue studies, have rejoined the unit: Maj. Cameron, Maj. Jacquest, Capt. Ross, Capt. Cornish, Lieut. Lambert.



The unit provided a Guard of Honour on the occasion of the opening of the Legislature on Feb. 14. The Guard consisted of 50 under the command of Capt. Ross and Lieut. Lambert.

The annual inspection took place on Mar. 16th. The unit was inspected by His Honor the Lieutenant Governor of Alberta and by Colonel Snow, D.O.C. M.D. 13.

According to the local regulations training time was reduced this year to 50 hours instead of the 110 hours which had been the rule during the war.

The annual spring camp was placed on a voluntary basis. Not enough students volunteered to justify holding a camp this year.

Only Basic Training was carried on during the year.

There was no senior training, except for a small group of senior students who wished to write the qualifying examination for commissions in the Reserve. Ten wrote the examination.

A reaction against military training was observable during the year, but, considering the time available, the training was satisfactory and the discipline good.

The future policy of training is now under discussion and should be known by mid-summer.

For the year 1946-47 it is recommended:

- (a) That military training be made optional to Physical Education. This would mean four hours per week. Experience this past year has shown that one parade a week is not satisfactory. Furthermore it has been necessary to call several Saturday afternoon parades in order to make up the required minimum of 50 hours.
- (b) That a better system of medical supervision be provided. Students who have minor ailments rarely see the medical officer and it is too easy to obtain signed cards at the Infirmary excusing a student from training or other physical exercise.

Next year it is proposed that the unit become again an Officers' Training Corps. This will reduce the numbers to between 75 and 100 on a selective basis. If four hours a week are available it will also be possible to do a great deal more training to qualify candidates for commissions in the Reserve on graduation.

### **Report of the Commanding Officer, University Naval Training Division, Lieutenant G. F. Dalsin**

The total strength of the U.N.T.D. at the time of registration in September, 1945, was 122. Of this number, 40 were second-year or third-year students. During the year this number was reduced as follows:

- (a) One rating went on active service, R.C.N., in December, 1945.
- (b) Three third-year students were discharged in January, 1946, at their own request.
- (c) One first-year student left the university in December and was subsequently discharged.

The strength of the unit as of April, 1946, was 117.

Training was carried on under satisfactory supervision of Lieut. H. Cochrane, who was appointed by the Area Commanding Officer to act as U.N.T.D.

Divisional Officer. He was ably assisted in the work of instruction by two Petty Officers from H.M.C.S. Nonsuch. Much credit must be given to the several ex-naval officers, now students at the University of Alberta, who offered and gave freely of their services in assisting with the instructional work.

The training syllabus for first-year and second-year students called for a maximum total of 60 hours. However it was found possible to complete only 49 hours of instruction including Saturday parades. As a result the 60-hour syllabus was condensed so that all topics might be given some attention. The instruction for first-year students included such topics as Gunnery, Seamanship and Naval Organization. The second-year students received instruction in Pilotage and Navigation, Ships, Torpedo-Anti-Submarine, Communications and Radar.

U.N.T.D. training includes two weeks at the West Coast in the spring. This year this period will be spent at sea, aboard a training frigate which will cruise to Alaska. Since only one vessel is available there will be three cruising periods beginning May 7, May 23, and June 8, respectively. According to present plans, 65 ratings will report for training on May 7, and 15 on June 8. There have been 26 postponements from training granted on the grounds of necessary summer employment. It is expected that most of the ratings who were granted postponements may take their training in September. There are 10 first-year students who have volunteered for full-time summer training.

All students taking second-year training were invited to sit before an Officer Selection Board in order to qualify as Officer Candidates in the U.N.T.D. On graduating they would then be accepted as Sub-Lieutenants in the Naval Reserve. The one rating who responded to this call was found unsuitable because of his academic record.

In March Naval Headquarters requested applications from graduating engineers for positions as Electrical, Ordnance and Engineering Officers. Two applicants were interviewed here but were found medically unfit. Applications were also invited from graduates in Commerce for positions in the supply branch but all graduates had been placed by that time.

This year being one of transition from a war-time to a peace-time basis certain difficulties were faced in the organization and training of the U.N.T.D. Because of the compulsory nature of military training for first-year and second-year students there results a lowered efficiency and a lack of interest on the part of some ratings. It is felt that voluntary enlistment in the unit and better screening of applicants would result in increased morale and better progress in training. The Naval Service has been unable during this year to make available the technical equipment necessary to complete the syllabus laid down for the second-year of training. This has definitely been a handicap in carrying out the proposed training programme. However, under present conditions, satisfactory results have been obtained this year, and a good amount of interest in future training has been shown by the majority of first-year students.

In conclusion, I wish, on behalf of H.M.C.S. Nonsuch, and Dr. Matthews whom I succeeded, to express appreciation for the co-operation received at all times from the C.O.T.C. and the University.



## Report of the Director of the Summer Session, Dr. H. E. Smith

### Registration

The registration of 1511 summer school students is shown in the following table:

	Men	Women	Total
Education .....	279	1000	1279
B.A. ....	17	25	42
B.Sc. ....	25	9	34
B.A., B.Ed. ....	1	1	2
B.Sc., B.Ed. ....	3	1	4
Clearing Deficiencies .....	41	7	48
B.Sc. in Agriculture .....	3	.....	3
B.Sc. in Applied Science .....	5	.....	5
B.A., LL.B. ....	4	.....	4
B.Com. ....	.....	1	1
B.Sc. in H.Ec. ....	.....	2	2
B.Sc. in Nursing .....	.....	5	5
M.Ed. ....	8	2	10
M.A. ....	2	3	5
Special Grad. ....	1	3	4
Auditors .....	2	4	6
Special .....	11	12	23
	<hr/>	<hr/>	<hr/>
	402	1075	1477
Calgary Summer Session .....	31	3	34
	<hr/>	<hr/>	<hr/>
	433	1078	1511

It is obvious from the above table that the great preponderance of students was registered in the Faculty of Education. It is interesting to note, however, that the summer school appears to meet a wide variety of interests.

The Summer Session at Calgary, with a total registration of 34, was conducted by a group of four instructors at Western Canada High School. A part of the High School premises was leased for the purpose. It is anticipated that in the 1946 session a similar school will require to be operated in Calgary but it is hoped that the Institute of Technology may be by that time in a position to offer the required courses.

### Guest Lecturers

The 1945 Summer Session was fortunate in having the assistance and inspiration of three outstanding guest lecturers. These were Professor W. M. Whitelaw of the University of Saskatchewan, who offered a course in Canadian History; Mr. Eugene Davis, from Cleveland, Ohio, who offered a combined junior and senior course in Dramatics; and Mr. Howard Leible, of the University of Michigan, who gave the senior course in Physical Education. The presence of these gentlemen on the campus added greatly to the attractiveness of our Summer Session offerings, and from reports received their classes were enjoyed by all who took them. It is submitted that the policy of inviting outstanding guest lecturers should be continued into the 1946 session on a scale, if possible, even more generous than that of 1945.

## *Accommodation*

Fortunately for the comfort of students attending the 1945 Summer Session, two of the University residences were available as living quarters. The availability of these two residences added appreciably to the success of the Summer Session in enriching the social life of the many students who found accommodation in the buildings. Evidently we were very fortunate in having Miss Simpson and Miss Newton as wardens of Pembina and Athabasca respectively. From the reports of the two wardens, it is clear that a great deal of student activity was developed which otherwise could not even have been attempted.

Student accommodation outside the residences appears not to have been over-taxed. At the beginning of the session a list of available rooms was put in the hands of students. The only complaints received were a few from landladies who had no one call to see their rooms.

Classroom accommodation constituted somewhat of a problem. It was anticipated that the Normal School building would be ready for occupancy but unfortunately the Examinations Branch of the Department of Education had got itself established in the building early in the year and it was not considered advisable to request that they move to other quarters. Accordingly the Deputy Minister of Education was asked to make available for Summer School use the Garneau School Building in place of the Normal School. This request was acceded to and at no cost to the Summer School. As the enrollment mounted it was found necessary to engage the auditorium of St. Stephens for certain of the larger classes.

It is anticipated that for the 1946 Session it will be necessary to use both the Education building and possibly also the Garneau Public School building. This will almost certainly be necessary if rehabilitation classes commencing in January are still meeting in the regular University classrooms.

## *Medical Services*

Dr. Heber Jamieson was again invited to act as Director of Medical Services for the Summer Session. On account of ill health, however, he was unable to accept, and on his recommendation, Dr. Max Cantor was invited to assume the post. This he did to the satisfaction of everyone concerned. Miss Revel consented to carry on as nurse in charge of the infirmary. The number of admissions to the infirmary was very small, the details of admission being contained in the official minutes of the Medical Services Committee.

As in the past, no medical examination was made of students entering the Summer School except for those who were registering in athletic courses. Dr. Warren, the University Provost, is now raising the question as to the desirability of having all Summer School students medically examined on their arrival. Inasmuch as they contribute to the Medical Services fund, it would seem reasonable that full medical services should be made available to them. A fee of \$1.00 is payable by every student, an amount which in the last two years has more than covered the expenses incurred. In the 1945 Session, as a gesture of goodwill towards the Medical Services Committee of the regular session, the Summer School Medical Services Committee voted a grant of \$200 for the purchase of a piece of equipment much needed in the Infirmary.

### *Students' Council*

The Students' Council Executive Committee consisted of five members under the chairmanship of Mr. Patrick, president of the Council. A generous tribute must be paid to the Committee for the highly resourceful and efficient manner in which the affairs of the Council were managed. Co-operation among the Committee members, the Advisers to men and women students, and the Director was of the finest, and a varied and interesting programme of student activities was provided. The closest sort of collaboration was achieved through the medium of weekly meetings, which were informal and cordial affairs but very effective.

The daily Bulletin was the work primarily of the news editor, who contrived to provide readable copy at an acceptable level in terms of style and content. The pictorial material was pertinent and artistically done. As in previous years, the costs of this publication were borne by the Summer School.

### *Student Advisers*

A special word of tribute is due to Dr. M. Winspear and Mr. Norman Kennedy for their effective work as advisers to women and men students respectively. Their services were generously available at all times and their advice was always appreciated.

### *Special Lectures*

Two public lectures were offered during the course of the Summer Session. Dr. W. M. Whitelaw, on August 9th, chose as his topic "Patterns in Canadian Life", while Mrs. C. Casselman, on August 16th, described some of her impressions of the San Francisco Conference. Both lectures were keenly appreciated. To events of this kind the student body does not appear to respond with marked enthusiasm, but the interest of citizens from over town seems to justify a continuation of this feature of summer school service.

### *Staff Pay*

The scale of pay to summer school instructors and assistants was made in terms of the following:

One 2-hour course .....	\$300.00
One and a half 2-hour courses .....	400.00
Two 2-hour courses .....	475.00
One 3-hour course .....	350.00
Special Visiting Lecturers (plus travelling expenses) .....	500.00
Instructor-demonstrators in activity programme	
courses, 2 hour .....	200.00
Group leaders .....	240.00
Lab. demonstrators, 12 hours weekly .....	125.00
Lab. demonstrators, 8 hours weekly .....	100.00
Library Assistants .....	150.00
Director .....	500.00

A number of special arrangements had to be made for accompanists in music and physical education courses, instructors in workshop courses of varying lengths, and for stenographic services part-time. It will be recalled also that permission was granted to pay lecturers coming from points outside Edmonton a special

grant of \$1.50 per day on living expenses, together with travelling expenses at the reduced rate of fare and one third.

The above schedule, with modifications of it to meet special circumstances, appears to be reasonably adequate. It is, I believe, impossible to secure the services of outstanding visiting instructors at a rate of pay less than that shown.

In terms of time and effort expended, the Director's salary is out of line with the remainder of the schedule. The Director's work begins in November and continues throughout the year until approximately a week after the summer session closes. As against a two-course programme of lectures the load carried by the Director is definitely greater. It is suggested that if the present policy of granting extra pay for summer school work is carried into the 1946-47 year, the Director's rate of pay be revised upwards.

### *Pay for Janitors' Services*

When buildings are leased by the Summer School it is considered reasonable that a small fee be paid the janitor staff for services rendered. In the case of Garneau School this amounted only to \$5.00 per janitor.

Obviously no extra pay can be allowed the caretaker staff of University buildings unless similar consideration is to be given to office staffs in other parts of the University service, or unless the work done is of a special nature falling outside the range of regular duties.

### *Conclusion*

The Director feels that the integrated Summer School is now well established in the principles of its operation. Staff members have worked together in the utmost harmony and have exhibited a thorough-going enthusiasm in their class work. The quality of performance demanded of students is judged to be satisfactory. With earlier registration and faster delivery of text-books, an appreciable improvement in pre-session preparation may still be anticipated. Summer School student morale has been excellent, thanks largely to the resourceful and enthusiastic efforts of the Students' Council Executive. To work with them, with the advisers, and with the wardens, has been a pleasure.

And finally, I wish to express to the President my keen appreciation of his steady support at all times and of his wise counsel whenever important issues were to be decided.

## **Report of the Director of the Department of Extension, Mr. Donald Cameron**

### **Table XIV.—Statistical Survey**

#### *Lectures*

#### Number of lectures:

University teaching staff .....	332	
Attendance .....	31,751	
Department of Extension staff .....	108	
Attendance .....	12,365	
Aggregate attendance .....		44,116
Number of radio talks .....	207	

### Conferences and Short Courses

University Week for Farm Young People .....	275
Refresher Course in School Administration .....	79
Refresher Course in Municipal Administration .....	59
Community Life Conferences:	
Park Lake .....	413
Gooseberry Lake .....	276
Shorncliffe Lake Junior Club Camp .....	29
Short Course for Employment Services Personnel .....	61
National Film Board Conference .....	25
C.B.R.E. Public Speaking Class .....	8
Land Inspectors' Short Course .....	90
Prospectors' Course .....	27
University Short Course and Co-op. Conference .....	281
Refresher Course in Pharmacy .....	90
Refresher Course in Medicine .....	323
Refresher Course in Nursing .....	50
Banff School of Fine Arts .....	427
Lethbridge Community Art School .....	15
Edmonton Short Course in Art .....	34
Medicine Hat Art Class .....	41
University Art Class (3 sessions) .....	72
University Weaving Class (3 sessions) .....	39
University Leathercraft class (3 sessions) .....	46
Aggregate attendance .....	2,760

### Visual Instruction

Number of times lanterns loaned .....	40
Filmslide and miniature projectors loaned .....	41
Sets of lantern slides sent out .....	424
Sets of miniature slides sent out .....	24
Number of times slides used .....	663
Aggregate attendance lantern lectures .....	31,750
Filmslides sent out .....	1,083
Aggregate attendance, filmslides .....	54,000
Sets of moving picture films sent out .....	2,603
Number of reels in sets sent out .....	10,445
Number of showings given .....	4,254
Aggregate attendance, moving pictures .....	568,933
National Film Board showings .....	3,412
*Aggregate attendance, N.F.B. showings .....	435,359
Total attendance, V.I. ....	654,683

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\* Until this year the attendance figures for the showings on the National Film Board Rural Circuits were included in the total attendance of the V.I. Division, since the rural circuits were then directly administered by the Department of Extension. If these figures were included this year it would mean adding 435,359 to the attendance total.



*Canadian Legion Education Services*

Registrations in tutorial classes .....	1,249	
Registrations in correspondence courses .....	3,936	
Registrations in directed reading courses .....	439	
	<hr/>	5,624
Total registration in C.L.E.S. courses, 1940-46 .....	25,458	

*Library and Debating Service*

Number of Travelling Libraries in use .....	92	
Number of times sent out .....	163	
Recorded circulation .....		6,889
Number of Special Libraries sent out .....	74	
Open Shelf Circulation:		
Books .....	29,743	
Pamphlets and Clippings .....	1,822	
Periodicals .....	2,704	
Plays .....	2,674	
	<hr/>	36,943
Books to Service Personnel .....		2,070
Books and magazines sent to Banff School of Fine Arts .....	848	
Number of package libraries for debaters sent out .....		178

*Study Group Material*

Number of sets of Citizens' Forum bulletins sent out .....	350	
Number of sets of other study group courses sent out .....	51	
	<hr/>	401

*New Canadian Plays*

Number of copies of New Canadian Plays sold .....	1,000
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*Publications*

Press Bulletin circulation (one issue)	7,500
Agricultural publications:	
Bulletins sent out during the year	18,944
Mimeographed circulars sent out during the year	
(estimate)	1,500
Barn Sheets and Soil Zone Maps distributed	14,800
	<hr/>
	35,244
Total number of bulletins distributed since inception	
of service	387,236
University News Letter:	
Number of issues	9
Circulation	1,710
Stage Door:	
Number of issues	6
Circulation	2,500
Alberta Folklore Quarterly:	
Number of issues	4
Circulation	5,500



## Recapitulation

Total aggregate attendance at lectures, lantern slide lectures, filmslides programmes, moving pictures, conferences and short courses, Canadian Legion Educational tutorial classes and correspondence courses .....	707,183
Total circulation of books, travelling libraries, package libraries, plays, periodicals, study group courses New Canadian plays .....	47,481
Total circulation of Press Bulletins, Agricultural Publications, News Letter, Stage Door, Alberta Folklore Quarterly .....	52,454

## Conclusion

The review of University extension activities included in this 33rd annual report\* covers a period which marks the transition from war to peace. During the war the spirits of millions of people were buoyed up by the hope that out of the holocaust would come a better world. As has been the case all through history the first months and years of peace are times of difficulty and disillusionment. This post-war period is no exception. In such a time the role that universities can play in meeting disillusion with hope, fear with confidence, and irresponsibility with facts, is vital indeed.

The responsibility of the University lies, not only in welcoming all who served in the war, in whatever capacity, but in extending the sobering light of knowledge to all its wide constituency in whatever degree that opportunity affords. If it is to do this effectively, there must be adequate financial, moral, and personal support from all who would benefit.

This report, emphasizing as it does the increasing use that is being made of university men and facilities, serves to underline the importance of the University in the reconstruction period.

## Report of the Director of the Provincial Laboratory, Dr. R. M. Shaw

On September 1st Dr. Allan C. Rankin, who so ably directed the work of the Laboratory since 1914 and carried its development to a high state of efficiency, retired from the Directorship and from active participation in its work.

Captain J. A. Romeyn, having been granted extended leave of absence from the R.C.A.M.C. on September 1st, 1945, returned to duty and has given valuable assistance both in the conduct of the work of the Laboratory and in teaching.

A reference to the attached detailed tables will reveal again an increase in the total number of specimens examined, amounting to 25,446. Much, though not all of this, is accounted for by the routine serological examinations of returning service personnel. On July 1st the amendment to the Marriage Act requiring the serological examination of blood specimens from contracting parties came into force and thus increased the civilian serological routine by some thousands of specimens annually.

The total number of serological tests, soldier and civilian, amounted to 96,020 as compared to 71,371 in 1944.

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\* The complete Annual Report on Extension Activities of the University of Alberta for the year ending March 31st, 1946, from which this excerpt is taken, is available in printed form.

Efforts directed towards venereal disease control have been responsible for a considerable increase in laboratory examinations for purposes of diagnosis and determination of progress in treatment.

The culture work in respect to venereal disease, referred to in last year's report, is continuing parallel with other methods of examination.

During the year the diagnosis of typhoid fever in 32 persons was confirmed by the isolation of the typhoid bacillus in culture. It is of interest perhaps that this organism was isolated 94 times during the year, 14 times from patients' blood.

Paratyphoid bacilli were isolated 12 times (once from the blood), while other related bacteria were found 57 times and dysentery bacilli on 13 occasions.

The work of the Department of Pathology has again shown increases both in numbers of surgical specimens examined and in autopsies performed. The rate of increase has been about 8 per cent for each of the past two years. During the war physicians were asked to request examination only of specimens absolutely essential to correct diagnosis, e.g., cancer, etc. With the removal of these restrictions, the rate of increase in this work will be greatly accelerated.

In line with previous reports for the past several years attention is again directed to the need of providing more physical accommodation. It is thought that those to whom appeals for increased space have been made have been unaware of the total volume of work carried on in the Provincial Laboratory and of the part played by the laboratory in the teaching of Pathology and Bacteriology since the inception of these courses in the University. No mention of this work appears in recent reports.

The following short statements will explain the part played by the Laboratory in University teaching:

1. Bacteriological and pathological specimens submitted to the laboratory for examination are, when suitable and after report is made to the physician, passed on to the students for study in their laboratory periods.
2. All bacteriological media and cultures for student use are prepared by the Provincial Laboratory staff using autoclaves and other equipment housed in that laboratory.
3. All glassware, including culture tubes, petri dishes, slides, etc., are returned to the Provincial Laboratory where this equipment is sterilized and washed up by the laboratory staff.
4. All sections of tissues studied by students are prepared in the Provincial Laboratory.

It is true that in the budgets of the teaching departments funds are provided for the payment of certain persons doing class work, but even so the teaching in the two departments cannot be carried on independently of the Provincial Laboratory without some very radical changes. It is the opinion of my departmental colleagues that the teaching departments concerned benefit greatly by the close association with the Provincial Laboratory.

Should the predicted increase in students for instruction in Bacteriology and Pathology become a fact, the present equipment will be inadequate to handle the additional work and available space will become so overcrowded as to result in a complete breakdown. There is no space to house more needed equipment and no room to accommodate the necessary staff for the increased teaching load.

There surely can be no dispute that the Provincial Laboratory performs a most important service in the aid it offers for (1) the diagnosis of disease, (2) the control of epidemics, (3) the distribution of biological products for treatment and prevention of infectious diseases, and (4) the part it plays in the collection and preparation of materials for teaching purposes and the assistance in the act of teaching. The students of the Faculties of Agriculture, Arts and Science, Dentistry, Medicine, including the School of Pharmacy, Home Economics, and Nursing, all derive benefit from this collaboration in teaching.

In spite of the overcrowding, the members of the staff have carried on cheerfully and efficiently with only an occasional trite remark respecting the existing overcrowded state of affairs. It is, of course, realized that neither the University authorities nor the members of the Government are aware that 22 girls, members of the laboratory staff, must change into laboratory garb on arrival for work and on leaving change back into street clothes in a room eight feet by nine feet in which are also housed the usual toilet facilities. Nor perhaps is it appreciated that the proposed extension of the east wing, predicted to become a fact during the summer, will shut-off completely all natural light and ventilation from a room in which Dr. J. W. Macgregor, Associate Professor of Pathology, his assistant and two internes do all microscopic examination of tissues submitted by surgeons or collected at autopsy. This must further curtail the working space in the Provincial Laboratory.

Recently there have been received 3,700 bottles of dried human serum, Alberta's share of the surplus of that produced by the Canadian Red Cross for the Armed Forces. Along with laboratory records of past years, a barrel of chloroform and many other things for which there is no other storage space, these are stored in the main corridor of the laboratory pending their distribution to the 100 hospitals in the province for use on patients requiring such materials.

These facts are presented with the honest desire to so direct serious attention to the overcrowded, unsatisfactory and unhealthy conditions of work, considering its type, in the hope that some relief may be afforded.

Without improvement in space and equipment in the Provincial Laboratory the teaching load predicted for the Departments of Bacteriology and Pathology for the session 1946-47 cannot be wholly undertaken.

**Table XV.—Commercial Value of Work if Minimum Charge  
Were Made in 1945**

Sputum Examinations .....	579	\$ 1.00	\$ 579.00
Diphtheria and Haemolytic Streptococci ...	2,292	1.00	2,292.00
Typhoid Fever .....	640	1.00	640.00
Milk .....	1,003	3.00	3,009.00
Water .....	2,487	10.00	24,870.00
Guinea pig inoculations .....	899	3.00	2,697.00
Miscellaneous .....	4,816	3.00	14,448.00
Plasma cultures .....	873	.25	218.25
Mother's milk .....	1	2.00	2.00
Urinalysis .....	61	1.00	61.00
Medico-legal (Blood, Seminal, etc.) .....	8	5.00	40.00
Cerebro-spinal fluids for the Wassermann test .....	2,803	1.00	2,803.00
Bloods for the Wassermann test .....	7,839	1.00	7,839.00
Bloods for Standard Kahn test .....	7,639	1.00	7,639.00
Bloods for Presumptive Kahn test .....	77,739	1.00	77,739.00
Smears for Gonococcus .....	21,469	1.00	21,469.00
Van den Bergh Determinations .....	385	1.00	385.00
Pathological Histological material .....	7,394	5.00	36,970.00
Blood Smear examinations .....	159	2.00	318.00
Ascheim Zondek tests .....	307	5.00	1,535.00
Comparative Series .....	10	3.00	30.00
Cerebro-spinal fluid (Colloidal Gold pandy) .....	2,928	2.00	5,856.00
Bacteriological examinations (P.M.) .....	50	5.00	250.00
B. abortus examinations .....	626	.50	313.00
B. tularensis examinations .....	626	.50	313.00
Cattle Blood examinations .....	2,687	.10	268.70
Autogenous Vaccine .....	22	5.00	110.00
Stock Vaccine .....	12	3.50	42.00
<b>Total .....</b>			<b>\$212,735.95</b>

### Report of the Director of the Industrial Laboratories, Mr. J. A. Kelso

During the year 3,790 examinations and analyses of some 180 different substances were carried out. Among those most frequently examined were: antifreeze compounds, barytes, human blood, brains, chick starter, clay, coal, diesel fuel, drugs, egg melange, animal feed, human food, gasoline, gold, kidneys, liquor, lime, livers, machine parts, meat, milk, narcotics, oil, ores, poisons, rock, sand, salt, sawdust, soap, soil, human and animal stomachs, straw, water, wheat urine, wood, and engineering and electrical materials, including aluminum test pieces, concrete test cylinders, gloves.

Engineering and electrical materials were tested by Departments of Civil and Electrical Engineering.

The usual court evidence and consultations were given under various Dominion and Provincial government acts and as required by the R.C.M. Police. Investigations were carried out in cases for Government departments such as Attorney General, Provincial Secretary, Veterinary Laboratory, Alberta Liquor Control Board, etc. Inspection of the Alberta breweries was done as required.





REPORT  
OF  
THE GOVERNORS  
OF THE  
UNIVERSITY OF ALBERTA  
1946-47



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*To the Lieutenant Governor in Council*

Sir:

On behalf of the Governors of the University of Alberta, and in accordance with Section 28 of The University Act, 1942, the undersigned have the honour to transmit through the Minister of Education the Report of the University of Alberta, setting forth the revenues and expenditures for the year ending March 31st, 1947, and the investments as they stood at the end of the fiscal year.

Appended to this report is the Report of the President of the University, in which the academic work of the University for the year, July 1st, 1946, to June 30th, 1947, is dealt with in detail.

ROBERT NEWTON, *President*

H. H. PARLÉE, *Chairman*

November 30, 1947



# Financial Statements

STATEMENT A.

## UNIVERSITY OF ALBERTA BALANCE SHEET AS AT MARCH 31, 1947

### ASSETS

#### FIXED:

##### Buildings and equipment in service:

Land, buildings and plant, Schedule No. 1 .....	\$4,495,858.71
Furnishings and equipment, Schedule No. 2 .....	1,182,603.10

#### CURRENT:

Cash on hand and in bank .....	\$ 112,987.31	\$5,678,461.81
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##### Accounts receivable:

Sundry debtors .....	\$ 57,861.67
Less: Reserve for doubtful accounts .....	2,500.00

\$ 55,361.67

Government of the Province of Alberta re medical building extension .....	62,654.43
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Department of Veterans' Affairs supplementary grant .....	122,680.58
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Accrued interest .....	240,696.68
Merchandise held for resale, Schedule No. 4 .....	4,241.67
Dominion of Canada bonds .....	70,395.48
	10,000.00

438,321.14

#### PREPAID EXPENSES:

Supplies on hand, Schedule No. 4 .....	\$ 52,503.52
Unexpired insurance .....	24,279.45
Legal retainer fee .....	375.00

77,157.97

#### OTHER ASSETS:

Temporary buildings .....	\$ 196,658.55
Livestock inventory .....	21,876.00
Deposit, Workmen's Compensation Board .....	8,564.00

227,098.55

Par Value Book Value

#### TRUST:

##### Investments: Schedule No. 5:

Dominion of Canada bonds .....	\$ 410,100.00	\$ 416,908.53
Province of Alberta debentures .....	685,600.00	685,881.77
Province of Alberta special adjustment coupons .....	20,769.60	19,554.58
Other bonds, debentures and shares .....	1,700.00	1,700.00

\$1,118,169.60 \$1,124,044.88

Cash on hand and in bank .....	217,019.96
Debenture interest receivable, deferred .....	99,167.00
Loans receivable .....	18,669.17
Mortgages receivable .....	10,685.27
Due from general account .....	5,944.03
Real estate and shares, nominal value .....	13.00

1,475,543.31

\$7,896,582.78

# LIABILITIES

## CAPITAL AND SURPLUS:

Advanced by the Government of the Province of Alberta .....	\$5,366,747.89	
Capital surplus .....	585,947.26	
		\$5,952,695.15

## CURRENT:

Imperial Bank of Canada loan .....	\$ 15,000.00	
Cafeteria tickets outstanding .....	1,271.82	
Accounts payable .....	247,329.75	
Due to trust account .....	5,944.03	
		269,545.60

## DEFERRED INCOME:

Fees .....		8,228.00
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## RESERVES:

Faculty houses .....	\$ 57,360.55	
Unexpended library fees and donations .....	28,044.53	
Premium on Rockefeller endowment .....	18,221.66	
Workmen's Compensation Board .....	11,258.75	
Blood plasma unit .....	10,000.00	
Organ repairs and extension .....	10,000.00	
Rink repairs .....	9,829.96	
Repairs and replacements .....	8,613.21	
Unexpended University Athletic Board fees .....	5,807.56	
Preliminary building expense, architect .....	3,085.58	
Operating .....	28,348.92	
		190,570.72

## TRUST:

General endowment Rockefeller Foundation .....	\$ 500,000.00	
Scholarships:		
Escheated estates .....	\$253,256.83	
General .....	170,416.45	
		423,673.28
Research .....	261,599.79	
Pensions and superannuation .....	52,127.91	
Student grants and loans .....	36,181.73	
General educational purposes .....	25,391.60	
Sundry .....	51,146.26	
Amounts administered or held for affiliated organizations and others .....	125,422.74	
		1,475,543.31
		\$7,896,582.78
		=====

Edmonton, Alberta, August 20, 1947.

I have audited the books and records of the University of Alberta for the year ended March 31, 1947.

Operations for the year under review resulted in an excess of revenue over expenditure of \$113,758.13 after providing from current revenues at a cost of \$314,221.55 the temporary buildings and additional equipment required to accommodate Department of Veterans' Affairs rehabilitation students. Revenues include \$295,172.50, being the estimated supplementary grant receivable from the Department of Veterans' Affairs. Details of operations are shown on Statement B and accompanying schedules.

The excess of revenue over expenditure for the year has been transferred to the operating reserve. Transactions within the reserve for the period are shown on Statement C.

The normal schools at Calgary and Edmonton and the summer school formerly under the jurisdiction of the Department of Education of the Province were as previously reported transferred to the University as from April 1, 1945. All expenditures in connection therewith are shown on the attached statements except for maintenance and upkeep of buildings which has been provided by the Province direct.

Financial Position

Buildings, plant, furnishings and equipment are stated on the Balance Sheet at original cost. No provision has been made for depreciation but University officials are of the opinion that the value of furnishings and equipment has been maintained by additions and renewals from revenue and reserve accounts.

Inventories of merchandise for re-sale and supplies on hand are certified as to quantities and prices by officials of the University.

Past due principal on mortgages receivable amounted to \$2,446.37 as at the date of the Balance Sheet.

Capital and surplus transactions during the year are summarized hereunder:

Capital advanced by the Government of the

Province of Alberta:

Balance at April 1, 1946 ..... \$5,154,813.47

Add:

Medical building additions ..... 180,330.61

Advance for equipment ..... 25,000.00

Implementation of guarantee ..... 3,000.00

Miscellaneous land and buildings ..... 3,603.81

Balance at March 31, 1947 ..... \$5,366,747.89

Capital surplus:

Balance at April 1, 1946 ..... \$ 120,221.86

Add:

Expenditure on staff suites ..... 77,639.45

Income contributions:

Library ..... 12,952.45

General ..... 375,277.45

Deduct: Bequest transferred to trust account..... 143.95

585,947.26

Balance at March 31, 1947 ..... \$5,952,695.15  
=====

Subject to the foregoing remarks, I certify that, in my opinion, the above Balance Sheet is properly drawn up so as to show the true financial position of the University of Alberta as at March 31, 1947, according to information and explanations given to me and as shown by the books of the University, and the accompanying Statement of Revenue and Expenditure correctly sets forth the result of operations for the year ended at that date.

C. K. HUCKVALE, C.A.  
Provincial Auditor



UNIVERSITY OF ALBERTA  
STATEMENT OF REVENUE AND EXPENDITURE  
FOR THE YEAR ENDED MARCH 31, 1947

REVENUE

Grants:		
Province of Alberta:		
General .....	\$ 825,622.00	
Supplementary .....	3,400.00	
Debt charges, see contra .....	189,446.20	
	<hr/>	
	\$1,018,468.20	
Dominion of Canada:		
Department of Veterans' Affairs, supplementary grant re rehabilitation students .....	313,596.80	
	<hr/>	\$1,332,065.00
Fees:		
Tuition, Schedule No. 7 .....	\$ 634,842.13	
Examinations and special, net, Schedule No. 8 .....	10,324.22	
	<hr/>	645,166.35
Interest on Rockefeller Foundation endowment .....	\$ 17,500.00	
Deduct: Transferred to medical research trust .....	5,000.00	
	<hr/>	12,500.00
Library fees, see contra .....		
University Athletic Board, fees, see contra .....		22,794.73
Operating departments net revenue, Schedule No. 9 .....		19,687.30
		33,543.89
		<hr/>
		\$2,065,757.27

EXPENDITURE

Instructional expense:		
Instructional salaries and direct expenses, net,		
Schedule No. 10 .....	\$1,008,530.64	
Maintenance of buildings, Schedule No. 11 .....	142,976.48	
Administrative salaries and expenses, Schedule No. 12 .....		
	69,904.30	
Library salaries and expenses, Schedule No. 13 .....	30,234.90	
Provision for library accessions, see contra .....	22,794.73	
Provision for University Athletic Board expenses, see contra .....		
	19,687.30	
Upkeep of grounds, Schedule No. 14 .....	18,642.14	
Veteran counselling, Schedule No. 15 .....	9,183.51	
Calendars and scientific publications, Schedule No. 16 .....		
	7,236.16	
Pensions, arrears, Schedule No. 17 .....	6,378.95	
Provost's office, Schedule No. 18 .....	3,856.61	
Alumni office, Schedule No. 19 .....	2,076.00	
Sundry, Schedule No. 20 .....	2,477.50	
	<hr/>	\$1,343,979.22
Public service departments net expenditure, Schedule No. 21 .....		
		104,352.17
Debt charges, see contra .....		189,446.20
Temporary buildings and additional equipment re Department of Veterans' Affairs students .....		
		314,221.55
		<hr/>
		\$1,951,999.14
Excess of revenue over expenditure for the year ended March 31, 1947, transferred to operating reserve .....		
		<hr/>
		\$ 113,758.13
		<hr/>

## STATEMENT OF OPERATING RESERVE

UNIVERSITY OF ALBERTA

FOR THE YEAR ENDED MARCH 31, 1947

Balance as at April 1, 1946 .....		\$ 16,801.85
Deduct:		
Adjustments of previous years' transactions:		
Sales tax assessment .....	\$ 4,197.71	
Sundry .....	1,957.45	
		<u>6,155.16</u>
		\$ 10,646.69
Add:		
Excess of revenue over expenditure for the year ended March 31, 1947 .....		<u>113,758.13</u>
		\$ 124,404.82
Deduct:		
Expenditure for capital assets:		
Equipment .....	\$ 34,340.40	
Buildings .....	16,718.69	
Electric lines .....	9,996.81	
		<u>61,055.90</u>
Provision for further expenditure re faculty houses	35,000.00	
		<u>96,055.90</u>
Balance as at March 31, 1947 .....		<u><u>\$ 28,348.92</u></u>

*To the Governors of the  
University of Alberta*

GENTLEMEN:

I have the honour to submit the following report on the work of the University of Alberta for the year ending June 30th, 1947.

ROBERT NEWTON  
*President*

# *The Report of the President*

*As Presented to the Medical Convocation, October 5, 1946*

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Tonight the last graduates from the wartime accelerated programme in Medicine receive their degrees. I reviewed for members of Convocation in January of this year the substantial gains in time of making medical and dental graduates available to the service of their country by this programme at the University of Alberta. Expressed in terms of man-months, these gains totalled 2,449. A little of this will now be lost in the case of Medicine, which faculty will have no more graduates till May, 1948.

By the end of the war most universities were ready to say, "Never again", with respect to acceleration. But the compelling needs of the men and women returning from war service led to the establishment of an overlapping session beginning last January, and a full summer term beginning in May. Now the students from these have come forward to the session just begun, swelling our university registration to a total well over 4,000. About two-thirds of this total are war veterans.

We have been put to all sorts of shifts and stratagems to meet the problems of space, equipment, and staff. A number of army huts have been erected on the campus, and more are projected, to add to our teaching space. Teaching equipment is exceedingly hard to come by. We had hoped to get some of this from surplus stores released by the armed forces, but these stores generally speaking have not been made available to the universities. Qualified staff are also scarce, especially those with teaching experience, and though we have appointed 150 new members since VE-Day, the burden on the older men is still very heavy.

Student housing was simplified by the unexpectedly good response of Edmonton citizens to a campaign organized by the students. Over 1,400 rooms were made available, though some of these were too distant, and others too high-priced, to be entirely suitable. More accommodation is also being provided for married veterans. To the 107 suites reconstructed from Dawson Creek huts, made available to married students last year, there are now being added 133 suites at the Air Port, with the financial aid of the Central Mortgage and Housing Corporation. The Provincial Government undertook the conversion of two large huts at the Air Port to quarters for 100 single student veterans, and is ready to provide further accommodation for single men there if needed.

Unfortunately there has been grave disappointment among a large number of would-be students, both veteran and civilian, who have been unable to enter the faculty of their choice, specifically Medicine and Dentistry. The numbers which can be accommodated in these faculties are fairly rigidly controlled by the clinical facilities available for the senior years. A member of the University of British Columbia recently completed a survey of all the medical schools in Canada and 22 in the United States. He reported the minimum ratio of candidates for entrance to available places found anywhere was 3:1, and in some of the most famous schools as high as 30:1. Only one thing could be worse than the collec-

tive frustration arising from such a situation, and that would be to lower the standards of instruction by taking in more than could be handled properly, and so exposing the public to the ministrations of inadequately trained practitioners.

This week we had to make the difficult decision as to whether or not to begin another overlapping session next January. There was danger in adding to the overcrowding and overloading, the danger that for the sake of another hundred students, who would require separate accommodation and instruction in many different courses, we might prejudice the quality of instruction of all 4,000 students in the University. Our negative decision was further influenced by the fact that a January class would have to unite with the present freshmen class next fall, a class already much the largest in the history of the University, too large for most effective instruction in the heavy laboratory courses of the senior years. Anything we do to level off the peaks in our registration curve will redound to the benefit of all students concerned throughout the whole of their four years in the University.

Now a word as to the place of a university in this troubled world. Peace and freedom are on the defensive. Modern war inevitably swings all governments towards a totalitarian basis. The fear of war has much the same effect. The vast preparations necessary for modern war can scarcely be carried out without introducing great deal of regimentation, a large number of centralized controls. We must learn, and achieve, the basis of peace or we shall lose permanently much of our freedom.

In the face of such a threat it is incumbent upon every citizen to examine himself as to whether he is doing all he can in his own place to protect and promote the cause of freedom. Members of a university may well take their stand on the dictum of Isaiah: "Wisdom and knowledge shall be the stability of thy times." Or, if they prefer a secular authority, on the words of Plato: "Until political greatness and wisdom meet in one, cities will never have rest from their evils—no, nor the human race."

Our job then is to promote wisdom and knowledge in ourselves and in our students. Graduates of a university should be apostles of wisdom and understanding, and so help our people achieve peace and freedom.

In a commencement address delivered in 1877, George William Curtis said: "Our safety lies not in our institutions but in ourselves." In another commencement address delivered in this year 1946, John Foster Dulles said: "It is dangerous to give freedom to people who do not feel under a moral compulsion to exercise self-restraint and self-sacrifice, who are not sufficiently educated so that they can see and understand the effect on others of what they do. An irreligious and uneducated people inevitably falls under despotism."

What kind of education will develop this self-discipline, this unselfishness and moral responsibility? If you answer that the first step is to provide teachers who are themselves devoted to these ideals, you will be right. But great as is the influence of informal contacts with such men, we are still bound to consider what further may be done by reorganization of the formal curriculum of studies. Faced with such a duty, we must embark on a programme of study and experiment.

A number of universities have undertaken studies along this line, and notable reports have been published by Harvard and Yale. It has become clear that a distinction must be made between general and special education. Special education

is designed to give a degree of mastery in one field, the field in which the student presumably intends to make his living after he leaves college. There has been an increasing tendency to devote more and more attention to a special field, neglecting the general education which is so necessary to the development of broad-minded citizens.

I am happy to announce that new students entering the Faculty of Arts and Science this fall have embarked on a programme designed to restore the balance. Other faculties of the University are giving close study to the same problem. All desire to do their part in making this University count to the utmost in promoting a saner post-war world.

### **The Report of the President**

*As Presented to Convocation, May 14th, 1947*

Today we complete a session marked by far the largest student enrollment in the history of the University. Last year's record total of 3,447 full-session students (including 454 who entered in January, 1946) is topped by this year's figure of 4,315. Of the latter, some 2,400 were ex-Service men and women. Summer session numbers in the two years were 1,511 and 1,479 respectively. From this it appears that summer session registration may have attained comparative equilibrium for the time being. The winter session peak will probably be attained next year. Though our freshmen registration next fall may be less than half this year's 2,076, it is still likely to be greater than the number we lose by graduation and normal wastage. After next year we expect a temporary recession spread over a few years.

Naturally we are suffering from growing pains. Our old bottles are quite inadequate to contain the new wine pouring from the post-war press of youth. It is cold comfort to students eager to prepare themselves for the practice of medicine and dentistry, and who fail to secure entrance to these faculties, to say we have in Alberta apparently taken in a higher proportion of our qualified candidates than has been possible anywhere else on this continent. Even the loss of a year's time in waiting for later entrance is a serious matter to ex-Service students of mature age. Some students had to be held back in pharmacy also, but by giving priority to those who had completed their two-year apprenticeship in drug stores, and advising the others to do this before entering the University, it was possible in most cases to protect them from real loss of time. In engineering all qualified candidates were admitted, including fifteen civilians held back in 1945-46. In no other faculty has there been any delay in admissions.

The students have, generally speaking, realized the special privilege of admission to a university under present crowded conditions. There have been signs of nervous exhaustion from over-work. Ex-Service students labour under the threat of losing their entitlement to D.V.A. benefits if they fail to pass their courses. Some doubtless suffer from placing credence in wholly groundless rumours that examinations are being stiffened in a deliberate attempt to reduce overcrowding. Actually the staff have "leaned over backwards" in their efforts to protect the interests of these returned men and women who deserve so well of their country.

Temporary huts have been erected to enlarge accommodation for class rooms, laboratories, and offices, and thanks to the painstaking work of the time-table committee, and the willingness of both staff and students to continue class



schedules far into the night, we have come through the session better than we dared to hope. But the necessity of pressing forward with our permanent building programme is all too obvious. I am glad to acknowledge the generous support of the Government of Alberta, and to assure you that, for the time being at least, funds are not the bottleneck in this programme. In spite of many other shortages, ranging from architects to nails, we are making reasonably satisfactory progress.

Incidentally, I must tell you that the current shortage of materials has caught up with Convocation itself. Some graduands may appear before you lacking a full complement of gowns, hoods, and mortar-boards, bringing home again the lesson that economically at least we are one world. We cannot destroy industrial plants and shoot away materials in any part of the world without feeling the effects in all parts.

Staff shortages, too, have been acute, and most instructors have carried abnormally heavy programmes. In spite of this, the University resumed immediately after the war its policy of giving leave of absence for advanced studies to a reasonable, if small, proportion of the staff. This policy is already bearing fruit in the return of these men with spirits refreshed and qualifications improved. Other qualified persons are becoming available with the completion of demobilization and the completion of post-graduate study under D.V.A. auspices of some of those demobilized one or two years ago. The general situation is therefore improving in many, though not in all, departments.

Housing has become the most critical feature of the staff problem. A number of families have been camping all winter in student rooms in Athabasca Hall and, notwithstanding twelve extra houses now nearing completion on the campus, there is no solution yet in sight for several new families coming to the University next fall.

There are no graduands in Medicine here today. Those who would normally have come forward now received their degrees last fall as a result of the accelerated programme they had followed. In Dentistry the post-war adjustment was made a year earlier. Dental graduands were lacking in May, 1946, but we are glad to welcome them back into their normal stride today.

The student body has completed a year of extraordinary achievement. Important steps have been taken in the necessary transition from a Student Union organization suitable for a small university to that required by a large one, especially with regard to athletics. It is a good omen that the athletic year was outstanding for its series of victories, including the three major intercollegiate trophies. Corresponding progress has been evident on the cultural and social side of student life. The University Mixed Chorus, the University Symphony Orchestra, and the Dramatics Club reached high levels of achievement. The successful housing campaign in September and the first annual Homecoming Day in October were first-rank contributions by the students to the life of the University. New features like the Parliamentary Forum and the Parliamentary Dinner indicate a new awareness of civic responsibility. Finally, the launching of the Students' Union building project was a natural development on the part of a mature student body, confident of its powers and ready to accept responsibility. To make at the same time a contribution of some \$12,000 to the Memorial Scholarship fund was wholly commendable.

The University is always conscious of its duty to the great mass of citizens who never have the privilege of studying within its walls. Our extension activities

this year touched directly in one way or another over 600,000 people. Twenty-two short courses were organized, varying in length from three days to six weeks and in subject from land appraisal to the fine arts. The summer school of fine arts at Banff had an attendance of 568 students after turning away over 200 for lack of accommodation. This school is beginning this spring, with help from private sources, the construction of its own first permanent buildings on the St. Julien site on Tunnel Mountain, a site unsurpassed for scenic grandeur.

The most important development during the session was the recent decision to offer immediately in the University's branch of the Faculty of Education at Calgary the full two-year course in teacher training. The Provincial Government gave hearty approval to this project and assured the University of extra funds as required to put the scheme into operation this fall. The two-year course is now the first complete unit of teacher training leading to permanent certification.

Teachers in training may be roughly divided into three groups: (1) those taking the general course, for which opportunities at Calgary and Edmonton will be approximately equal; (2) those taking the option in industrial arts (electricity, metals, automotive, woodwork, mechanical drawing), for which facilities are available only at Calgary; (3) those taking options in agriculture, household economics, fine arts, and physical education, for which facilities are available only at Edmonton. Thus Edmonton students who wish to prepare themselves to teach industrial arts must go to Calgary to train, and Calgary students who wish to select one of the third group of options must come to Edmonton.

Students taking the four-year course leading to the B.Ed. degree must complete their programmes at Edmonton, but may take the first two years at Calgary without handicap. Where options desired are available only at Edmonton, their course will be planned to cover these during their third and fourth years.

Professors A. W. Downs, J. P. Sackville, E. W. Sheldon, and Edouard Sonet, also Mr. Archibald West, Bursar, complete this year their long and honorable terms of service to this University. We thank them for their day's work well done, and wish them a very good evening, warmed by a sense of worthwhile accomplishment and continuing opportunity for happy service.

During the year the last post sounded for James Adam, Donald Ewing Cameron, and Albert Edward Ottewell. Their names will remain as landmarks in our University's history.

On February 6, 1947, Henry Marshall Tory, joint founder with the late Premier Rutherford, and first president of the University, died at Ottawa in his 84th year. Dr. Tory found this campus empty of all save prairie grass and poplar scrub. He left it studded with substantial buildings, manned by devoted scholars, thronged by eager students. His ambition to establish here such a tradition of research and inquiry after truth as could not easily be broken was amply fulfilled. He would have been pleased to hear today that during the session just ended 138 post-graduate students have been at work in this University, each doing his bit to push back the bounds of knowledge.

Today's graduands are fortunate in offering their service in a sellers' market. Their country needs them in a very literal sense. The large numbers of undergraduates coming forward will perhaps restore equilibrium between supply and demand next year, and a year later may find again severe competition for jobs. It behooves us, on the one hand, to maintain high standards, that University of Alberta graduates may continue to be recognized as an elite group, and, on the

other hand, to do our part in making Canada such a progressive country as constantly to increase the demand for men and women of high character and trained minds.

We confidently depend upon those going out to new tasks tomorrow, with the mark of this University upon them, to cherish its good name and diligently to think on and promote whatsoever things are true, honest, just, pure, lovely, and of good report. To this high task we bid them Godspeed.

\* \* \* \*

Appended are tabular data concerning academic staff numbers; academic staff appointments and promotions; leave of absence, retirements, and resignations; student registration; gifts; new scholarships, prizes and medals; staff publications; and excerpts from the reports of the Deans, Directors, Librarian, Provost, and Commanding Officers of Armed Service training units.

Table 1.—Academic Staff Numbers

<i>Administrative Officers</i>	
President .....	1
Executive Assistant to the President .....	1
Deans of Faculties .....	7
Directors of Schools .....	3
Director of the Summer Session .....	1
Provost .....	1
Adviser to Women Students .....	1
Librarian .....	1
Superintendent of the University Hospital .....	1
Registrar .....	1
Assistant Registrar .....	1
Alumni Secretary .....	1
Bursar .....	1
Accountants .....	2
Wardens of Residence Halls .....	3
Director of Rehabilitation Courses .....	1
Adviser to Student Veterans .....	1
	<hr/> 28
<i>Full-time Teaching Staff</i>	
Professors .....	40
Associate Professors .....	39
Assistant Professors .....	43
Lecturers .....	19
Instructors .....	42
	<hr/> 183
On Leave of Absence:	
Associate Professors .....	2
Assistant Professors .....	1
Lecturers .....	3
<i>Part-time Teaching Staff</i>	
Professors .....	12
Associate Professors .....	2

Clinical Professors .....	8	
Assistant Professors .....	10	
Lecturers .....	24	
Instructors .....	69	
Demonstrators and student assistants .....	182	
	<hr/>	307
<i>Department of Extension</i>		
Director .....	1	
*Assistant to the Director .....	1	
Assistant Professor .....	1	
Librarian .....	1	
Assistant in Study Groups .....	1	
	<hr/>	5
<i>Research Council of Alberta</i>		
Associate Research Professor .....	1	
Research Chemist .....	1	
Industrial Engineer .....	1	
Chemist .....	1	
Geologist .....	1	
Assistants .....	7	
Co-operating members of the University Faculty .....	8	
	<hr/>	20
<i>Library</i>		
Librarian .....	1	
Reference Librarian .....	1	
Chief Cataloguer .....	1	
Junior Assistants .....	5	
	<hr/>	8
<i>Industrial Laboratories</i>		
Director .....	1	
Assistant .....	1	
	<hr/>	2
<i>Provincial Laboratory of Public Health</i>		
Director, Provincial Bacteriologist .....	1	
Pathologist, Provincial Serologist .....	1	
Assistant Pathologist .....	1	
Assistant in Bacteriology .....	1	
	<hr/>	4
<i>Other Academic Staff</i>		
Hospital Teaching Staff .....	4	
Dietitians .....	2	
Radio Secretary .....	1	
	<hr/>	7
Total .....		564
Less duplicates .....		33
	<hr/>	
Total Academic Staff .....		531
	<hr/>	

\*On leave of absence.

## Table II.—Academic Staff Appointments and Promotions

### *Faculty of Arts and Science*

- Andrew Stewart, B.S.A., M.A., from Associate Professor to Professor of Political Economy.
- Henry George Glyde, A.R.C.A., Associate Professor of Art.
- Douglas Smith, M.A., Ph.D., from Assistant Professor to Associate Professor of Psychology.
- Robert Karl Brown, M.Sc., Ph.D., Assistant Professor of Chemistry.
- Walter Edgar Harris, M.Sc., Ph.D., Assistant Professor of Chemistry.
- Aylmer Arthur Ryan, M.A., from Sessional Lecturer to Assistant Professor of English.
- Robert H. G. Orchard, M.A., Assistant Professor of Drama.
- Robert Edward Folinsbee, B.Sc., M.Sc., Ph.D., Assistant Professor of Geology.
- Anthony M. Mardiros, M.A., M.Litt., Assistant Professor of Philosophy.
- Wray Merrill Bowden, B.A., Ph.D., Sessional Lecturer in Botany.
- Constance I. MacFarlane, M.A., Sessional Lecturer in Botany.
- Edward Moore, M.A., Lecturer in Zoology.
- Lorene Louise Kennedy, M.Sc., Sessional Instructor in Botany.
- Robert George Christiansen, B.Sc., Sessional Instructor in Chemistry.
- Dorothy Erica Coggles, B.Sc., Sessional Instructor in Chemistry.
- Margery Walker MacKenzie, B.A., B.Ed., Sessional Instructor in Latin.
- Margaret Nancy Davis, B.A., Sessional Instructor in English.
- Robert Rodger Wark, M.A., Sessional Instructor in English.
- Marion Wray Lauder, Sessional Instructor in Music.
- William John Bruce, B.Ed., Sessional Instructor in Mathematics.
- Louis Castelli, B.Sc., Sessional Instructor in Mathematics.
- Lawrence Archibald Fisher, B.Sc., B.Ed., Sessional Instructor in Mathematics.
- Agnes Young Fleming, B.Com., B.Ed., Sessional Instructor in Mathematics.
- Marjorie McGregor, B.Sc., Sessional Instructor in Mathematics.
- Leonard Carl Pallesen, B.Sc., B.Ed., Sessional Instructor in Mathematics.
- Leslie C. Radford, B.Ed., Sessional Instructor in Mathematics.
- William Harold Robertson, B.Sc., Sessional Instructor in Mathematics.
- Albert Shaw, B.Sc., Sessional Instructor in Mathematics.
- Anatole W. Poushinsky, Sessional Instructor in Russian.
- Marguerite Primeau, B.A., Sessional Instructor in French.
- Ernest Reinhold, B.Sc., Sessional Instructor in German.
- Thomas Gillespie, M.Sc., Sessional Instructor in Physics.
- Marguerite I. Henry, B.Sc., Sessional Instructor in Physics.
- John Edwards Mayhood, B.Sc., Sessional Instructor in Physics.
- Eric John Hanson, B.A., M.A., Sessional Instructor in Political Economy.
- Robert Whitlaw Ross, B.Com., Sessional Instructor in Political Economy.

### *School of Commerce*

- Alex Johnston Hamilton, B.Sc., B.Com., C.A., Sessional Instructor in Accounting.
- Edward King, B.Com., C.A., Sessional Instructor in Accounting.
- John McLellan Meikle, B.Com., C.A., Sessional Instructor in Accounting.



### *School of Household Economics*

Helen S. Bentley, M.A., Sessional Instructor in Household Economics.

Mary S. Hood, B.Sc., Sessional Instructor in Household Economics.

### *Faculty of Agriculture*

Arthur Wellesley Henry, M.S.A., Ph.D., from Associate Professor to Professor of Plant Pathology.

Robert James Hilton, B.Sc., Ph.D., Associate Professor of Horticulture.

Paulden Ford Knowles, M.Sc., Ph.D., from Assistant Professor to Associate Professor of Field Crops.

John Wallace Howe, B.S.A., M.S., from Lecturer to Assistant Professor of Animal Science.

Franklin William Wood, M.S., Assistant Professor of Dairying.

Brian Hocking, B.Sc., Assistant Professor of Entomology.

William George Corns, B.S.A., M.Sc., Assistant Professor of Plant Science.

Charles Fred Bentley, M.Sc., Ph.D., Assistant Professor of Soils.

Barney Thorvardur Stephanson, B.E., Lecturer in Agricultural Engineering.

Warren Edward Smith, M.Sc., Lecturer in Field Crops.

James Edwin Price, B.S.A., M.Sc., Sessional Instructor in Animal Science.

Lloyd Muir Smith, B.Sc., Sessional Instructor in Dairying.

### *Faculty of Applied Science*

Robert Starr Leigh Wilson, B.Sc., Professor Emeritus of Civil and Municipal Engineering.

Robert McDonald Hardy, B.Sc., M.Sc., D.L.S., A.L.S., S.L.S., Dean, Faculty of Applied Science.

James A. Taylor, B.Sc., Ph.D., Professor of Chemical Engineering.

Leonard Eustace Gads, B.Sc., Assistant Professor of Civil Engineering.

Jack Williams Forster, B.Sc., M.S., Sessional Lecturer in Civil Engineering.

David Panar, B.Sc., M.Sc., Sessional Lecturer in Mechanical Engineering.

Michael Nikon Shandro, B.Sc., Sessional Lecturer in Electrical Engineering.

James Allin Brown, B.Sc., Sessional Instructor in Civil Engineering.

Harry Allen Carswell, B.Sc., Sessional Instructor in Civil Engineering.

John Norman Fead, B.S., Sessional Instructor in Civil Engineering.

Donald Southam Harvie, B.Sc., Sessional Instructor in Civil Engineering.

Robert John Hollingshead, B.Sc., Sessional Instructor in Civil Engineering.

Henry Ludwig Kasten, B.Sc., Sessional Instructor in Civil Engineering.

Emil James Sanden, B.Sc., Sessional Instructor in Civil Engineering.

### *Faculty of Dentistry*

Reyburn R. McIntyre, L.D.S., D.D.S., Honorary Professor of Orthodontics.

Hector Robert MacLean, D.D.S., from Associate Professor to Professor of Operative Dentistry.

Robert Arthur Rooney, D.D.S., from Assistant Professor to Associate Professor of Prosthetic Dentistry.

John Haddin Barr, B.Sc., B.D.S., D.D.S., Assistant Professor of Dentistry.

Sperry David Fraser, D.D.S., from Lecturer to Assistant Professor of Prosthetic Dentistry.

John Warrington Neilson, B.A., D.D.S., M.Sc. Dent., Assistant Professor of Peridontia and Oral Pathology.



George Archibald Brass, D.D.S., B.S.D., Lecturer in Operative Dentistry.  
 Robert Bruce Cameron, D.D.S., L.D.S., Lecturer in Dental Therapeutics.  
 William Orobko, B.Sc., D.D.S., Lecturer in Operative Dentistry.  
 William Edward Webber, D.D.S., L.D.S., Lecturer in Professional Ethics.  
 Robert Henry Blaquiére, D.D.S., Sessional Instructor in Prosthetic Dentistry.  
 Benjamin Joseph Eastwood, D.D.S., Sessional Instructor in Prosthetic Dentistry.  
 Alan Douglas Fee, D.D.S., Sessional Instructor in Prosthetic Dentistry.  
 Donald Eugene Florence, D.D.S., L.D.S., Sessional Instructor in Oral Anatomy.  
 James Douglas McLean, D.D.S., Sessional Instructor in Prosthetic Dentistry.  
 Duncan Russell Stewart, D.D.S., Sessional Instructor in Prosthetic Dentistry.  
 William Ross Stuart, D.D.S., Sessional Instructor in Prosthetic Dentistry.

#### *Faculty of Education*

Herbert Thomas Coutts, B.A., M.A., Associate Professor of Education  
 Maimie Shaw Simpson, M.Sc., M.Ed., Associate Professor of Education.  
 Harry Theodore Sparby, B.Sc., M.A., Associate Professor of Education.

#### *Faculty of Law*

Horace Gilchrist Johnson, LL.B., Sessional Instructor in Law.  
 Carlton W. Leviston, B.A., LL.B., Sessional Instructor in Law.  
 Kenneth Albert MacKenzie, B.A., LL.B., Sessional Instructor in Law.

#### *Faculty of Medicine*

Jermyn Oscar Baker, M.D., C.M., F.A.S.C., F.R.C.S.(C), M.R.C.O.G.,  
 Honorary Professor Obstetrics and Gynecology.  
 Heber Carss Jamieson, B.B., F.R.C.P.(C), Honorary Professor of Medicine.  
 Walter Stirling Anderson, B.Sc., M.D., M.Sc., F.R.C.S.(C), F.A.C.S., from  
 Lecturer to Assistant Clinical Professor of Surgery.  
 William Christopher Stewart, B.A., M.A., M.D., C.M., Assistant Professor  
 of Physiology.  
 Walter Campbell MacKenzie, B.Sc., M.D., C.M., M.S., from Instructor to  
 Lecturer in Clinical Surgery.  
 Gordon Neil Tucker, M.D., from Instructor to Lecturer in Urological Surgery.  
 Mary E. Greene, B.A., M.Sc., Sessional Instructor in Bacteriology.  
 Marshall Mallett, M.D., C.M., from Honorary Instructor to Instructor in  
 Radiology.  
 Herbert Meltzer, M.D., Instructor in Clinical Surgery.  
 Thomas Campbell Michie, M.D., Instructor in Psychiatry.  
 Paul Rentiers, B.A., M.D., M.Sc., Instructor in Dermatology.  
 Harold Lane Richard, M.D., F.R.C.S.(C), Instructor in Clinical Surgery.  
 Ashbury Somerville, M.A., M.D., D.P.H., Instructor in Hygiene.

#### *School of Nursing*

Eleanor MacIntosh, B.Sc., R.N., Science Instructor.

#### *School of Pharmacy*

John Randolph Murray, B.Sc., Lecturer in Pharmacy.  
 Bernard Edward Riedel, B.Sc., Lecturer in Pharmacy.

#### *Department of Physical Education*

Richard Lee Hughes, B.Sc., M.A., Assistant Professor of Physical Education.  
 Tessa Mae Johnson, A.B., M.S., Assistant Professor of Physical Education.

### *Department of Extension*

Andrew Stuart Rankin Tweedie, M.A., Assistant Professor of Extension.

### *Library*

Lilian Emily Mary Leversedge, B.A., B.L.S., Order Librarian.

Norma Louise Watterberg, B.Sc., B.L.S., Junior Assistant.

### *Other Appointments*

Alan William Bell, B.Com., M.B.A., C.A., Executive Assistant to the President.

Geoffrey Bradford Taylor, M.Sc., Registrar.

Alexander Duncan Cairns, B.A., Assistant Registrar.

John Clemence Gordon Brown, B.A., Alumni Secretary.

Maimie Shaw Simpson, M.Sc., M.Ed., Adviser to Women Students.

Constance I. MacFarlane, M.A., Warden of Pembina Hall.

James Kenneth Ferguson, B.Com., C.A., Junior Accountant.

Murray Alexander Rousell, B.Com., C.A., Junior Accountant.

Margery Walker MacKenzie, B.A., B.Ed., Radio Secretary.

James Francis Elliott, B.A., M.D., F.R.C.P.(C), Infirmary Physician.

Maxwell Mordcai Cantor, B.Sc., M.D., F.A.C.P., Infirmary Physician for 1946 Summer Session.

Elsie Park Gowan, B.A., Editor of "Stage Door".

Ernest Sydney Keeping, B.Sc., D.I.C., Curator of Art Exhibits.

### **Table III.—Leave of Absence**

George Murray Dunlop, M.A., Associate Professor of Education.

Andrew Leo Doucette, M.A., Associate Professor of Education.

Theophilus George Finn, B.A., M.A., Assistant Professor of Education.

George Wheeler Govier, B.A.Sc., Assistant Professor of Chemical Engineering.

Elio D'Appolonia, B.Sc., Lecturer in Civil Engineering.

George Ford, B.Sc., Lecturer in Civil Engineering.

Frank W. Peers, B.A., B.Ed., Assistant to the Director, Department of Extension.

Phyllis Cowan, B.A., Radio Secretary.

### **Table IV.—Retirements**

Jermyn Oscar Baker, M.D., C.M., F.A.C.S., F.R.C.S. (C), M.R.C.O.G., Professor of Obstetrics and Gynecology.

Heber Carss Jamieson, M.B., F.R.C.P.(C), Professor of Clinical Medicine and History of Medicine.

Reyburn R. McIntyre, L.D.S., D.D.S., Professor of Orthodontics.

### **Table V.—Resignations**

Kenneth Farnum Argue, B.A., M.A., D.Ed., Associate Professor of Education.

George York Barnett, L.D.S., D.D.S., Instructor in Prosthetic Dentistry.

John Haddin Barr, B.Sc., B.D.S., D.D.S., Assistant Professor of Dentistry.

George Alexander Elliott, M.A., Professor of Political Economy.

John Ferguson, B.A., A.M., Ph.D., Assistant Professor of Physiology.  
Jonas Christian Jonason, M.A., Associate Professor of Education.  
Clem Livingstone King, B.Com., C.A., Executive Assistant to the President.  
Marion Edna Montgomery, B.A., B.L.S., Junior Assistant, Library.  
Eleanor MacIntosh, B.Sc., R.N., Science Instructor, School of Nursing.  
Muriel Evelyn Mary Richards, B.Sc., Lecturer in Household Economics.  
Sidney Risk, B.A., Lecturer in Drama.  
Robert Starr Leigh Wilson, B.Sc., Professor of Civil and Municipal Engineering and Dean of the Faculty of Applied Science.

Table VI.—Registration

Total Registration (full and summer session and short courses)	Civilian			Rehabilitation			Totals											
	Men	Women	Total	Men	Women	Total	Total Men	Total Women	Grand Total									
46-47	45-46	46-47	45-46	46-47	45-46	46-47	45-46	46-47	45-46									
Add Cancellations	1434	1417	1808	2102	3242	3519	2450	1398	115	63	2565	1461	3884	2815	1923	2165	5807	4980
	36	...	22	...	58	...	50	...	12	...	62	...	86	...	34	...	120	...
Less Duplicates	1470	1417	1830	2102	3300	3519	2500	1398	127	63	2627	1461	3970	2815	1957	2165	5927	4980
	27	58	49	50	76	108	83	57	5	4	88	61	110	115	54	54	164	169
	1443	1359	1781	2052	3224	3411	2417	1341	122	59	2539	1400	3860	2700	1903	2111	5763	4811
I. Full Session:																		
1. Arts and Science:																		
B.A.	45	27	110	100	155	127	84	40	16	7	100	47	129	67	126	107	255	174
B.Sc.	158	154	83	79	241	233	251	128	11	6	262	134	409	282	94	85	503	367
B.A., B.Com.	1	1	...	...	3	2	4	3	...	...	4	3	1	5	3	...	7	5
B.A., B.Sc. (Ag.)	...	...	...	...	1	1	...	...	...	...	...	...	...	1	...	...	1	1
B.A., B.Sc. (Eng.)	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B.A., B.Sc.	30	22	...	3	30	25	77	49	2	1	79	50	107	71	2	4	109	75
Pre-Dental	5	5	...	...	...	5	40	79	1	1	40	80	107	84	40	40	109	85
B.Sc., D.D.S.	4	3	...	...	4	3	11	...	...	...	11	...	15	3	...	...	15	3
B.Sc., M.D.	20	39	8	10	28	49	123	85	4	2	127	87	143	124	12	12	155	136
B.Sc., B.Ed.	1	1	1	1	1	2	...	1	...	...	...	1	...	2	1	1	3	1
B.A., B.Ed.	...	...	...	4	...	4	...	1	...	...	...	1	...	1	...	4	...	5
2. Agriculture	258	256	205	197	463	453	590	386	33	17	623	403	848	642	238	214	1086	856
3. Commerce	91	77	4	3	95	80	208	109	...	...	208	129	299	186	4	3	303	189
4. Dentistry	38	28	16	14	54	42	228	128	4	1	232	129	266	156	20	15	286	171
5. Education:	37	44	...	1	37	45	71	13	...	...	71	13	108	57	...	1	108	58
Edmonton:																		
B.Ed.	52	56	132	119	184	175	322	145	36	17	358	162	374	202	168	135	542	337
B.A., B.Ed.	3	1	6	8	9	9	...	2	...	...	...	2	3	3	6	8	9	11
B.Sc., B.Ed.	2	3	2	1	4	4	...	...	...	...	...	...	2	3	2	1	4	4
B.Com., B.Ed.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B.Ed. after B.A.	2	2	2	...	4	...	...	...	...	...	...	...	...	...	2	...	...	1
B.Ed. in Ag.	6	6	...	...	6	...	2	4	...	...	2	...	8	...	...	...	8	...
War Emergency	...	45	...	188	...	233	3	...	...	...	...	4	57	49	...	188	165	237
Junior E. and I.	54	...	108	...	162	...	...	...	...	...	3	...	...	...	108	...	165	...
	119	106	250	316	369	422	327	151	36	17	363	168	446	257	286	333	732	590

Table VI—Registration—continued

	Civilian			Rehabilitation			Totals					
	Men		Total	Men		Women	Total		Total Men		Total Women	Grand Total
	46-47	45-46	46-47 45-46	46-47	45-46	46-47 45-46	46-47	45-46	46-47 45-46	46-47 45-46	46-47 45-46	46-47 45-46
<b>Calgary:</b>												
B.Ed.	3	3	7	2	...	...	2	...	5	3	4	13
Junior E. and I.	41	...	85	...	...	...	...	...	41	...	44	...
War Emergency	9	18	18	...	...	...	...	...	9	18	9	101
Industrial Arts	20	13	20	18	7	...	18	7	38	20	...	38
	73	34	130	20	7	...	20	7	93	41	57	114
	192	140	499	347	158	36	383	175	539	298	343	447
<b>6. Engineering:</b>												
First Year	100	54	101	282	305	...	282	305	382	359	1	2
Chemical	38	43	39	71	21	...	71	21	109	64	1	...
Civil	56	61	56	86	26	...	86	26	142	87	...	1
Electrical	45	66	47	94	38	...	94	38	139	104	2	1
Mining	20	16	20	70	14	...	70	14	90	30	...	...
Eng. Physics	4	6	4	4	...	...	4	...	8	6	...	...
	263	246	267	607	404	...	607	404	870	650	4	4
<b>7. Household Economics:</b>												
B.Sc., H.Ec.	...	...	92	...	...	13	13	11	...	...	105	105
B.H.Ec.	...	...	9	...	...	1	1	1	...	...	10	10
	...	...	101	...	...	14	14	12	...	...	115	115
<b>8. Law</b>	8	9	9	42	30	...	42	30	50	39	1	...
<b>9. Medicine</b>	101	119	115	39	20	1	40	21	140	139	15	14
<b>10. Nursing:</b>												
B.Sc.	...	...	102	...	...	8	8	...	...	...	110	85
Diploma	...	...	87	...	...	2	2	...	...	...	89	100
Dip. Pub. Health	...	...	13	...	...	6	6	...	...	...	19	14
	...	...	206	...	...	16	16	...	...	...	222	199
<b>11. Pharmacy:</b>												
B.Sc.	16	15	32	50	25	4	54	25	66	40	20	23
Diploma	4	...	4	7	5	3	10	6	11	5	3	6
	20	15	36	57	30	7	64	31	77	45	23	29

12. Graduates:																		
M.A.	17	13	6	6	23	19	11	5	...	...	11	5	28	18	6	6	34	24
M.Sc. (Ag.)	13	14	...	...	13	14	8	7	...	...	8	7	31	21	...	...	21	21
M.Sc.	23	15	5	...	28	15	8	5	1	...	9	5	31	20	6	...	37	20
M.Sc. (Eng.)	13	10	...	...	13	10	4	4	...	...	4	4	17	14	...	...	17	14
M.Ed.	14	16	4	3	18	19	9	2	1	...	10	3	23	18	5	4	28	22
Special	10	9	16	10	26	19	4	5	...	...	4	5	14	14	16	10	30	24
	90	77	31	19	121	96	44	28	2	1	46	29	134	105	33	20	167	125
13. Theology																		
14. Auditors	3	6	...	...	3	6	1	...	...	...	1	...	4	6	...	...	4	6
15. Partials	9	4	8	...	17	12	...	...	...	...	...	...	9	4	8	...	17	12
	20	35	30	14	50	49	12	2	3	...	15	2	32	37	33	14	65	51
Total Full Session																		
	1130	1056	943	1025	2073	2081	2246	1308	116	58	2362	1366	3376	2364	1059	1083	4435	3447
	36	...	22	...	58	...	50	...	12	...	62	...	86	...	34	...	120	...
	1094	...	921	...	2015	...	2196	...	104	...	2300	...	3290	...	1025	...	4315	...
Cancellations																		
II. Summer Session:																		
Edmonton	321	333	878	1070	1199	1403	188*	69	11*	5	199	74	509	402	899	1075	1398	1477
Calgary	18	28	2	3	20	31	53**	3	...	...	53	3	71	31	2	3	73	34
Banff	1	...	7	...	8	...	...	...	...	...	...	...	1	...	7	...	8	...
	340	361	887	1073	1227	1434	241	72	11	5	252	77	581	433	898	1078	1479	1511
III. Short Courses:																		
Diploma Dairying	...	...	...	4	...	4	13	18	...	...	13	18	13	18	...	4	13	22
	1434	1417	1808	2102	3242	3519	2450	1398	115	63	2565	1461	3884	2815	1923	2165	5807	4980

\*Includes 29 rehabilitation men students and 2 women who began studies May 1.

\*\*Includes 20 rehabilitation men students who began studies May 1.



**Table VII.—Distribution of Full-Time Students According to School or Faculty and Year of Course, Session 1946-47**

School or Faculty	First	Second Year	Third Year	Fourth Year	Fifth Year	Totals
Arts and Science .....	549	416	111	10	....	1086
Agriculture .....	150	112	21	20	....	303
Commerce .....	169	99	17	1	....	286
Dentistry .....	51	26	14	17	....	108
Education .....	560	222	61	39	....	882
Engineering .....	382	302	128	62	....	874
Household Economics .....	48	41	26	....	....	115
Law .....	21	19	11	....	....	51
Medicine .....	42	37	44	32	....	155
Nursing .....	45	48	51	42	36	222
Pharmacy .....	44	34	22	....	....	100
	2061	1356	506	223	36	4182
Adjustment .....						253
						4,435

**Table VIII.—Distribution of Rehabilitation and Civilian Students According to Sex and Marital Status, Session 1946-47**

	Men		Women		Not Specified	Total
	Single	Married	Single	Married		
Rehabilitation .....	1296	824	96	8	138	2362
Civilian .....	976	93	876	36	90	2073

**Table IX.—Distribution of Students According to Home Address and Birthplace, Session 1946-47**

**A. British Empire-Commonwealth:**

	Home Address	Birthplace
(a) Canada:		
Edmonton .....	1638	768
Calgary .....	562	491
Lethbridge .....	85	90
Medicine Hat .....	41	61
Red Deer .....	52	38
Vegreville .....	13	32
Wetaskiwin .....	29	29
Camrose .....	20	24
Cardston .....	26	39
Others .....	1525	1596
Alberta .....	3991	3158
Nova Scotia .....	2	19
Prince Edward Island .....	....	8
New Brunswick .....	3	3
Quebec .....	4	20
Ontario .....	19	102
Manitoba .....	19	145
Saskatchewan .....	168	401
British Columbia .....	121	142
Yukon and N.W.T. ....	1	1
	4328	3999
(b) Other Parts of the British Empire- Commonwealth:		
British Isles .....	....	102
Dominions .....	....	3
Crown Colonies .....	2	5
	4330	4109

**B. Countries Outside the British Empire-Commonwealth:**

Balkan States (Yugoslavia, Rumania, Bulgaria, Albania, Greece and Turkey in Europe) .....	....	21
Germany, Austria .....	....	11
Poland .....	....	54
Russia and the Ukraine .....	....	25

Scandinavian States (Sweden, Norway, Denmark and Iceland) ..	.....	7	
United States of America .....		77	
Others .....	1	23	
Information Not Specified .....		7	218
		98	108
		<hr/> 4435	<hr/> 4435

**Table X.—Gifts**

From the National Research Council, \$37,522.65 in accountable advances for research carried on under the direction of the following staff members: Dr. R. K. Brown, \$750; Dr. J. W. Campbell, \$50; Dr. M. M. Cantor, \$895; Dr. W. G. Corns, \$500; Dr. W. E. Harris, \$2,383.02; Dr. A. W. Henry, \$1,548.47; Dr. G. Hunter, \$3,514.48; Dr. P. F. Knowles, \$1,000; Dr. G. O. Langstroth, \$2,420; Dr. J. L. Morrison, \$1,600; Dr. A. G. McCalla, \$9,354; Dr. L. W. McElroy, \$1,000; Dr. J. D. Newton, \$1,000; Dr. H. Orr, \$1,600; Dr. J. J. Ower, \$200; Dr. J. A. Romeyn, \$1,226.32; Dr. W. Rowan, \$30; Dr. R. B. Sandin, \$750; Dr. D. B. Scott, \$2,552.85; Dr. R. F. Shaner, \$480; Dr. R. D. Sinclair, \$2,500; Dr. W. C. Stewart, \$185.83; Dr. J. Tuba, \$900; Dr. O. J. Walker, \$1,082.68.

From the Provincial Department of Agriculture, a grant of \$5,000 to aid in providing facilities in poultry work in the Department of Animal Science.

From the Rockefeller Foundation, a research grant of \$2,000 for the Department of Political Economy.

From an anonymous donor, a grant of \$2,000 in aid of Dr. Sandin's cancer research.

From Canada Malting Company Limited, \$1,000 for barley breeding work in the Department of Plant Science.

From United Grain Growers Limited, \$1,000 to assist research work in the Department of Plant Science.

From Mrs. J. H. Woods, Calgary, \$5,000 to endow the Colonel J. H. Woods Canada-United States Library collection.

From the Canadian Legion Educational Services, some 3,000 reference books, which were formerly in the local C.L.E.S. library, for the Extension Library.

From the Law Society of Alberta, \$500 for the purchase of books and periodicals for the Law Library.

From the College of Physicians and Surgeons, Province of Alberta, \$200 for the purchase of books for the Medical Library.

From Dr. G. F. McNally, Chancellor of the University, a collection of books on history; from Mrs. J. E. McKenzie, Calgary, a collection of books on the early history of Canada and the western United States; from Mrs. J. R. Watt, Claresholm, a collection of books on Scottish literature and history; from Miss Linda B. McAdam, West Roxbury, Mass., an autographed copy of "The Habitant" by W. H. Drummond; from Mr. E. Currie, Edmonton, three volumes on eighteenth century surgery and medicine; from Mr. C. Gallinger, Edmonton, three volumes of Coate's Shorthorn Herd Book; also gifts to the Library from the University of Western Ontario; Miss Ida Faust, Pottstown, Pa.; Field Marshal the Viscount Montgomery of Alamein; Mr. A. Halkett, Edmonton; Professors R. K. Gordon, C. R. Tracy, and D. M. Healy.

From a group of friends and colleagues of the late Mr. D. E. Cameron, a portrait of him by N. de Grandmaison, to hang in the Library.

From Dr. E. L. Pope, a portrait of Dr. Heber C. Jamieson, Honorary Professor of Medicine, to hang in the Medical Library.

From the "Friends of the University", 157 individual members, \$2,301.50.

From T. Eaton Co. (Western) Ltd., Calgary, \$5,000 in merchandise to provide furnishings for the Banff School of Fine Arts.

From the Hudson's Bay Company, Edmonton, \$1,000 for the development of the Banff School of Fine Arts.

From the Academy of Medicine, Edmonton, a Bausch and Lomb Balopticon, valued at approximately \$400, for use in one of the medical lecture theatres.

From the General Electric X-ray Corporation, a dental X-ray machine on indefinite loan, for use in the Faculty of Dentistry.

From the Alberta Pharmaceutical Association, \$275 for the purchase of a refrigeration unit for the School of Pharmacy.

From C. Woodward Limited, Edmonton, \$115 to provide an additional stop for the rebuilt Memorial Organ.

From the Class of 1947, a \$100 Dominion of Canada Bond, to be allocated to some suitable piece of furniture or furnishings for the proposed Students' Union Building.

From Mr. F. V. Seibert, C.N.R., Winnipeg, a geographic wall map of north-west Canada, dated 1857.

From Mr. D. A. MacKie, Nelson, B.C., a collection of Lepidoptera.

From Mr. F. W. Radcliffe, RCA Victor Company Limited, Montreal, an album of four records of French-Canadian songs.

#### **Table XI.—New Scholarships and Prizes**

*Tenable at the University of Alberta or available to University of Alberta students:*

From Standard Investments Limited, the fourth and final instalment of \$7,500 in support of the President's Scholarship Fund.

By the will of the late Mr. Harvey Renkenberger, Barons, \$5,000 to capitalize a scholarship for a student in Economics with special emphasis on co-operation.

From Canadian Sugar Factories Limited, a \$500 scholarship in the Faculty of Agriculture, to be awarded annually for five years.

By the will of the late Dr. Henry Marshall Tory, \$2,000 to endow "The Annie Gertrude Tory Scholarship".

From Mr. and Mrs. W. W. Sharpe, Stettler, two scholarships of \$150 each for five years, to be known as "The Douglas Haig Sharpe and the George Harold Sharpe Memorial Scholarships".

From the College of Physicians and Surgeons, Province of Alberta, a research fellowship in the Faculty of Medicine, valued at \$1,000.

By the will of the late Mrs. Letitia S. Dickson, \$1,000 to endow "The Trenholme Dickson and Letitia S. Dickson Prize" in Canadian history and literature.

From the Canadian Foundation for the Advancement of Pharmacy, a total of \$950 to provide a teaching fellowship during the 1946-47 session in the School of Pharmacy; also two \$100 scholarships in the School of Pharmacy.

From the Alberta Teacher's Association, "The John Walker Barnett Scholarship" of \$300, to be awarded annually in the Faculty of Education.

From the Fuller Brush Company, Limited, Calgary, \$200 for an art scholarship in the Department of Fine Arts.

From the J. W. Dafoe Foundation, a \$200 scholarship to be awarded to a University of Alberta student in the final year of his course in one of the social sciences; also a \$2,000 fellowship to be offered at large.

From Dr. S. A. MacGregor, Toronto, \$50 for a Pro Liberis prize to a fourth year student in the Faculty of Dentistry for a thesis on the subject "Interception of Malocclusion".

From P.E.O. Sisterhood, Edmonton, a prize of \$50.00 to be awarded to a woman graduate going into social service work.

From Drs. L. Allen, J. W. Clay, E. M. Doyle, H. L. Freeland, R. R. McIntyre, J. S. Stewart, and J. Zimmerman, an annual contribution of \$50.00 each, and from Dr. H. E. Beddingfield, an annual contribution of \$25.00, to establish a Postgraduate Scholarship Fund in Dentistry.

From Mr. George E. Cole, Winnipeg, a prize of \$25.00 to a senior student in economic geology, to be awarded annually for at least four years.

From the Chemical Institute of Canada, two annual book prizes of the value of \$25.00, to be awarded to students entering their graduating year with the highest standing in the Departments of Chemistry and Chemical Engineering.

From the Canadian Institute of Mining and Metallurgy, Northern Alberta Branch, an increase in the prize awarded in the Faculty of Applied Science from one \$15.00 prize to two prizes of \$25.00 and \$15.00 respectively.

From Dairy Supplies Limited, a prize of \$20.00 to be awarded to the student with the highest standing in the Diploma Course in Dairying.

From the Alberta Pharmaceutical Society, a prize of a five-year subscription to the Practical Pharmacy Edition of the Journal of the American Pharmaceutical Association for the student obtaining the highest mark in the dispensing course in the second year.

*Available to students studying under the Western Board of Music:*

*For the Prairie Provinces:*

From Gelatine Products, a \$300 scholarship tenable at Music Teachers' College, University of Western Ontario.

*For Alberta:*

From the Maritime Provinces Association of Edmonton and Mount Allison Conservatory of Music, a scholarship tenable at this Conservatory, the latter to reduce fees by \$200 and the former to provide approximately \$200.

From the Edmonton Civic Opera Society, an increase from \$100 to \$300 in the scholarship offered.

From the Edmonton Bulletin, \$250.

From Mr. John Burns, Calgary, \$200.

From the Women's Canadian Club, Calgary, \$100.

From Radio Station CFAC, Calgary, \$100.

From Radio Station CFCN, Calgary, \$100.

From the Calgary Power Company Limited, \$100.

From Radio Station CFGP, Grande Prairie, \$100.

From the Lethbridge Herald, \$100.

From the Edmonton Musicians' Protective Association, \$75.

From Fisher's Music Supply, Calgary, book prizes to the value of \$75.

From Heintzman and Company, Edmonton, an increase from \$50 to \$100.

From Canada Western Distributors Ltd., Edmonton, \$50.

From Pepin and Sons, Edmonton, \$50.

From Dr. G. O'Brien, Grande Prairie, \$50.  
 From National Home Furnishers Ltd., Edmonton, \$30.  
 From Mr. G. Duncan, Grande Prairie, \$25.  
 From Mr. Ross, Grande Prairie, \$25.  
 From Mr. J. Jensen, Peace River, \$25.  
 From the Lions Club, Andrew, \$25.  
 From Stewart Brothers, Red Deer, \$15.  
 From Mrs. E. B. St. Jean, Rycroft, \$5.  
 From Mr. V. Vagt, Grande Prairie, \$5.

## Table XII.—Publications by Staff

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### *EXCERPTS FROM THE REPORTS OF ADMINISTRATIVE OFFICERS*

#### **Report of Dean J. Macdonald of the Faculty of Arts and Science**

##### *Recommendations for Degrees*

The number of students recommended for degrees at the Convocation of May 14, 1946, is as follows:

For the B.A. degree .....	46
For the B.Sc. degree .....	80
For the B.Com. degree .....	12
For the degree of B.Sc. in Household Economics .....	22
	—
	160
	—

##### *Progress During Session*

The new curriculum which was adopted for the B.A. and B.Sc. degrees in 1945-46 has been operating with first year students in the session 1946-47, and it appears to promise satisfactory results. The new plan of advance registration for students in the upper years of the B.A. and B.Sc. degrees has been put into operation and the advanced registrations were completed in the two weeks prior to the commencement of examinations. It is too early to say yet how far that arrangement will be helpful and it will be reported on later.

I have again to report that the question of adequate space has been a serious one during the session. Further, the efforts of the members of the faculty have been severely taxed in coping with the problem of instruction of classes which are, in many cases, still undesirably large. I am glad, however, to be able to add that I have found the staff completely co-operative and the spirit of the faculty continues to be excellent.

#### **Report of Dean J. Macdonald, Chairman of the School of Commerce**

During last session, 1946-47, and the preceding two sessions, the members of the School have been trying to give effect to the general aim set out in the 1946-47 calendar, page 272, namely, "to provide a broad cultural and technical background" and to place the emphasis "on basic principles and fundamental concepts rather than on the rule of thumb details of special positions in particular industries." Three specific steps have been taken with this broader aim in mind. First, Spanish (which, of necessity, was beginners' Spanish) was dropped and English 2 was made compulsory for all students. The School found that even the Trade Commissioner's Department which, in any case, would provide openings for a

relatively small number of the students, gave no special encouragement to retain Spanish as a compulsory requirement in the Commerce course. Second, the third year prescription was liberalized. Third, a fourth year described as Business Administration was organized and sanctioned by the Faculty Council. This fourth year will give an opportunity to students who are interested in fields outside of technical Accountancy. It is the intention to admit to this year only students who are of genuine honors calibre.

### **Report of Professor Mabel Patrick, Director of the School of Household Economics**

In addition to 115 students registered for the degrees of B.Sc. and B.H.Ec., there were 48 students from the Faculty of Education and 75 from the School of Nursing taking courses in the Department, making a total of 238 students.

One student is completing the Student Dietitian Training course, given at the Dining Halls and Cafeteria.

There has been an increased demand for graduates in Home Economics, not only in Alberta but across Canada, and very few have been available for positions. Several hospitals in the province are without dietitians.

Facilities in the Department of Household Economics have been taxed to capacity this year, but it is anticipated that there will be additional space next year. One section of the first year class in Clothing was held in the evening. The instructor reports that considerably less work was accomplished by the students in this section. This she attributed to fatigue.

### **Report of Dean R. D. Sinclair of the Faculty of Agriculture**

The activities of the Faculty of Agriculture in the University of Alberta fall into two main divisions, (1) academic and (2) experimental. For convenience in preparing this report the work of the Faculty will be sub-divided under these headings.

It seems proper however to mention that, in addition to teaching and conducting experimental work, members of the staff of the Faculty of Agriculture devoted a considerable amount of time to extension work during the year. It is felt that the results of research must be made available as quickly as possible if the greatest practical benefit is to be derived by the farm people of Alberta. Then too, contact with farmers serves to keep staff members in touch with problems arising on the farm. Direct communication with farmers has been achieved through addresses at farm meetings, agricultural short courses and field days, and by means of personal interviews. The usual bulletins and circulars have been issued. Several members of the staff addressed three separate classes of students in attendance at the Agricultural Vocational Training School at Red Deer and in this way established a connection between the Faculty of Agriculture and a substantial group of young farmers taking up land under the terms of the Veterans Land Act. Radio talks were given regularly throughout the year on the Alberta Farm and Home Forum program broadcast over CKUA. The Dean of the Faculty of Agriculture serves as Chairman of a committee which directs the Farm and Home Forum programme. Close co-operation was offered by all Departments to the Department of Extension of the University and the Extension Service of the Alberta Department of Agriculture.

### *Academic*

Teaching conditions have been improved considerably during the past year through certain additions to the staff and by the provision of additional laboratory and office space. The need for more laboratory space for the Departments of Agricultural Engineering and Dairying is still serious however, and as the staff of the Dominion Department of Agriculture at the University of Alberta increases the matter of sufficient accommodation for this group becomes more pressing.

Twenty-two students engaged in agricultural research were registered in the School of Graduate Studies. Of this number eight came to the University of Alberta from other provinces. Twelve completed the requirements for the M.Sc. degree during the year. Graduate students helped out with teaching work in a very substantial way during the year.

A six-months Dairy Short Course was offered during the year under a joint arrangement between the Department of Dairying, the Dairy Branch of the Alberta Department of Agriculture, and Canadian Vocational Training. Only rehabilitation students were eligible for this course and, as a result of this, the registration was restricted to thirteen students. It is hoped that the course may be made available to non-veterans another year in order that the needs of the dairy industry for trained personnel may be more fully met.

The Faculty of Agriculture co-operated with the Department of Extension in offering three short courses, one for the Institute of Appraisers, one for Sanitary Inspectors of the Alberta Department of Public Health, and one for the rural sales supervisors of the Imperial Oil Limited.

Students in the Faculty of Agriculture did excellent work during the year and a very good relationship existed between Faculty and students. Not a single case of any consequence requiring disciplinary action was reported to the office of the Dean during the year. Having in mind the comparatively large proportion of student veterans involved, this record is gratifying indeed. During the spring term the Agricultural Club sponsored a Field Day at the University Farm. This event was very successful and it is hoped that it may become an annual event.

### *Experimental*

Although members of the staff carried a substantial teaching load throughout the academic year the investigational work in the Faculty of Agriculture was maintained on an active scale. As in previous years several grants were received from commercial organizations and from the National Research Council and a number of projects continued to receive assistance from a University Committee on Agricultural Research Grants.

During the year the Department of Agricultural Engineering assisted with the work of the National Committee of Agricultural Engineering and also with the activities of the Alberta Agricultural Engineering Committee. Under the latter committee a project was organized in connection with the harvesting of forage crop seed. Observations were made on the new sugar beet harvesting machinery being introduced into Southern Alberta.

Feeding trials and laboratory studies were carried out by the Department of Animal Science during the year. Five graduate students were engaged on research projects which would form a basis for M.Sc. theses. Main emphasis was placed during the year on a project dealing with the nutritional value of Alberta grown grains. The protein, mineral, and vitamin content of certain Alberta feeds was



determined and feeding trials with pigs and chickens were conducted. Certain aspects of this work were carried out in co-operation with other Departments in the Faculty of Agriculture under a main project entitled, "Soil and Plant Relations Affecting the Nutritional Value of Foods and Feeds." A new co-operative project on sheep feeding, sponsored by the National Sheep Committee, entitled "Effect of Plane of Nutrition and Vitamin A Fed to Pregnant Ewes on Subsequent Lamb Crop" was initiated during the year. The use of forage crops in beef production was studied further and the palatability factor in connection with the feeding of urea to dairy cows was given further consideration. Poultry feeding trials dealt with the level of riboflavin in the ration of breeding birds, the use of synthetic riboflavin in chick starters, and the effect of heat on the nutritive value of soybean oil meal and meat and fish meals.

The twenty-fifth annual Feeders' Day was held early in June, and to celebrate a quarter century of progress a special issue of the University Press Bulletin was published as a means of recording the experimental results of the year. Feeders' Day attracts several hundred people to the University Farm each year and it undoubtedly plays an important part in connection with our public relations activities.

In the Department of Dairying studies were continued on the problems of rancidity in milk and cream on a modified basis. The bacteriological rather than the chemical aspects were emphasized.

Investigation work in the Department of Entomology was centered on the Hessian fly. An attempt was made to ascertain the earliest safe date for seeding in the spring in order to avoid infestation. Conditions for germination during the spring were such that the date of seeding appeared to have little bearing upon the date on which the crop appeared above the ground. The insects were found to be present in the fall, although of no economic importance in the central part of the Province.

Research in the Department of Plant Science has been assisted by the National Research Council, University Agricultural Research Trust, Maple Leaf Milling Co., United Grain Growers, Canada Malting, and the National Grain Company. The trend in the Department is towards fundamental research. Work on plant proteins was expanded considerably during the year and excellent results are now being obtained with the electrophoresis apparatus.

On the basis of extensive research and testing at the University during the past year, "Lemhi", a new soft wheat developed in Idaho, has been recommended for licensed sale in Canada. Several of our barley hybrids were rated highly in the National Barley Test. An extensive barley breeding program is under way. Special emphasis is being placed on disease resistance as well as good agronomic qualities.

An active antibiotic substance was isolated from *Bacillus Subtilis* and tested extensively. It appears to show definite promise in the control of some plant disease organisms. An epidemic of fire-blight in apples afforded an opportunity to study control measures.

Preliminary work on control of weeds with chemical sprays yielded good results. Both "Sinox" and "2,4-D" were used.

Some work on new varieties of gladioli and carnations has been continued and at the same time many strains deemed to have insufficient merit to justify



multiplication have been discarded. There is widespread interest in these new flower strains.

Visitors' Day was held on August 3 and was well attended. Along with Feeders' Day, this special event seems to put the public at large in touch with the agricultural work at the University and thus give them a more direct interest in the institution.

The one hundred acres of land purchased for the Department of Plant Science during the year 1945-46 from the City of Edmonton will allow for a gradual expansion of field and orchard work. The Department of Plant Science suggests that this land be called "The Parkland Farm" as distinct from "The University Farm".

The Department of Soils continued to participate in soil survey work and during the year special consideration was given to the needs of the north country where land clearing schemes are being carried out for the purpose of speeding up the settling of returned service men. Difficulty has been experienced in securing the services of personnel properly qualified for soil survey work and as a result applications for completed surveys are far in excess of present facilities.

The regular fertilizer trials and laboratory research projects were continued during the year. It gives a great deal of satisfaction to record that the Breton experimental plots, consisting of twenty acres, were purchased by the University during the year. These plots have been in continuous operation under contract for seventeen years. The purchase of the Breton plots ensures continuity in the fertilizer experiments which are so significant in connection with the utilization of the vast wooded soil areas of Alberta.

In conclusion it may be recorded that a good spirit prevailed in the Faculty of Agriculture during the year 1946-47. Members of the staff entered enthusiastically into the task of providing returned service men with the best training possible and in carrying out their other responsibilities in relation to teaching, research, and extension.

### **Report of Dean R. M. Hardy of the Faculty of Applied Science**

All student veterans with satisfactory academic standings who applied for admission were accommodated in the Faculty last fall. Admission of civilians to the first year was restricted to those with matriculation standing of 65% or better. However, fifteen civilian students with averages less than 65% who were refused admission for the session 1945-46 were also admitted to the first year of the present session.

The academic progress of students in all years has been generally satisfactory. The problems of individual students have been of a somewhat different nature than was the case in normal times. The student body in general seemed to have a feeling that they are working under highly competitive conditions to the extent that a fixed percentage will be failed. It has been found very difficult to correct this impression. An appreciable percentage of the student veterans have perhaps been working too hard and many of their problems have their background in nervous conditions resulting, in my opinion, from over-study. The large percentage of the student veterans who are married and in many cases who have families has resulted in a variety of personal problems having their background in unsatisfactory home conditions.

Employment opportunities for graduates are exceptionally good at the present time. We have been unable to satisfy many requests for immediate graduates in all branches of engineering. A significant development this session has been the comparatively large number of corporations who have sent personnel parties to the University for the purpose of selecting engineering graduates for employment.

The employment situation for undergraduates for the coming summer is remarkably good considering the large number of students who are available for work. To the best of my knowledge any engineering undergraduate can be placed in employment this summer if he does not restrict his preference for employment to a certain locality or a certain type of work.

The organization set up for teaching staff, lecture rooms, laboratory space and equipment for the past session, while by no means perfect, functioned surprisingly well. We were able to meet the staff requirements fairly adequately, although there is no doubt that the senior staff have again carried serious overloads.

The demand for post-graduate instruction increased somewhat over past sessions. Graduate instruction and research work were carried on in the Departments of Mining and Civil Engineering. In point of fact the faculty during the past session accommodated a greater number of graduate students than at any time in its history. This has resulted in additional overload to senior members of staff but has had the compensating effect of providing junior instructors for at least part-time work.

Four members of the Applied Science teaching staff of the previous session were granted leave to pursue graduate work during the past year. One of these was away on sabbatical leave. The remaining three have never been considered as permanent additions to the staff. However, one of the latter has accepted an appointment on our staff for the coming session. This policy of granting leave for graduate work, while it aggravates the immediate situation, seems to be working out reasonably well from the point of view of providing more adequately qualified staff for the large senior classes of the next few years.

The co-operation of the members of the academic staff has, without exception, been exceedingly satisfactory. Extraordinarily heavy administrative duties have been carried along with their academic duties by the more senior members of staff. The junior staff, many of whom were attempting graduate studies along with academic assignments, have been extremely conscientious in giving preference to their academic duties rather than to their personal studies. With some of them I am afraid an injustice is being done their graduate programs due to the heavy loads they were asked to carry on part-time appointments.

### **Report of Dean W. Scott Hamilton of the Faculty of Dentistry**

For first year Dentistry this session we had 275 applications. Fifty-one were accepted, forty-nine of whom were ex-service men. For the coming session it will not be possible to accept as many as we did last year, because of lack of laboratory space. This means that a large number of qualified applicants must once again be rejected, for the applications are beginning to pile up in the Registrar's office.

Dr. J. H. Barr made a tour of Western Canadian cities giving extramural lectures. Other members of the Faculty have been on the programmes of conventions. At the forthcoming convention in Banff, our Faculty is giving ten lectures, photographic demonstrations, or table clinics.

We have been very fortunate in being able to augment the Faculty with a number of young men, who were recently discharged from the Canadian Dental Corps. Of these, four took post-graduate training in American universities during 1945-46, and another spent two years and will be with us next session.

Because of delay in the delivery of steel the new dental clinic will not be ready for occupancy for about another year. When it is complete, however, we will have a very fine and up-to-date clinic. Equipment has been selected for its convenience and utility, and the design of the building is such as to give every consideration to both students and patients. The same cannot be said of our laboratory facilities. This will be relieved slightly by utilizing space which will be freed when we move to our new clinic, but it does not solve the problem completely.

I should like to express my appreciation for the loyal support of the faculty and non-academic members of the staff. Thanks are also extended to the President for his tolerance in considering our many requests and suggestions.

### Report of Dean M. E. Lazerte of the Faculty of Education

#### *Graduation List*

If all the students on the graduating list are successful in their examinations, the graduation list in May, 1947, will be as follows:

	Summer Session 1946	1946-47	Total
M.Ed. ....	1	3	4
M.A. (In Education) .....	—	1	1
B.Ed. and Sr. Dip. ....	50	77	127
B.Ed. ....	10	3	13
Sr. Dip. ....	8	4	12
Jr. Dip. ....	9	25	34
Sr. E. and I. ....	.....	13	13
Jr. E. and I.: .....	.....		
Edmonton .....	.....	161	161
Calgary .....	.....	85	85
	—	—	—
	78	372	450

#### *Expansion of Activities in the Faculty of Education*

A notable expansion of activities in the Faculty of Education is taking place during the current session. By arrangement with the Minister of Education and the Board of Trustees of the Clover Bar School Division, a liaison is being established between the Clover Bar School division and the Faculty of Education. The Minister of Education has appointed a second superintendent of schools for the area who will work with staff and students in the Faculty of Education. The Faculty of Education in turn will give its services without charge wherever members may be of assistance to teachers of the division.

As a matter of fact, our staff assistance is on a larger scale than this. School and staff members will spend from two to four weeks in May and June with the various superintendents of schools throughout the province assisting with supervision of rural schools. This is one of the significant recent developments in rural education in Canada.

During the last year, the Education and Guidance Clinic in the faculty, under the direction of Dr. H. E. Smith, has expanded rather rapidly. I am very pleased

with the progress that is being made. Problem cases are being referred to the clinic from the city schools. It will not be long until the service may be expanded to include nearby rural areas and serve a still more useful role in the training of graduate students.

A number of student veterans are planning intramural graduate work in Education for the coming season. Already there are about 15 or 20 tentative registrations. It will be the first time that we have had an intramural class at the graduate level.

## **Report of Professor G. H. Steer, Acting Dean of the Faculty of Law**

### *Teaching Staff*

There were two full-time members, W. F. Bowker and C. W. Leviston. Mr. Leviston is entering private practice after the conclusion of the session. It is planned to have three full-time members on the staff next year. Difficulty is experienced in finding suitable personnel but it is expected that the two vacancies will be satisfactorily filled.

The courses not taught by Mr. Bowker and Mr. Leviston were given by the following sessional instructors, all of whom are barristers practising in Edmonton: L. Y. Cairns, K.C., R. Martland, K.C., C. W. Clement, K.C., F. J. Newson, G. W. Auxier, A. T. McLean, H. G. Johnson, K. A. MacKenzie, A. Smith.

As in the past, and particularly during the five years since Dean Weir's death, the part-time instructors have given invaluable assistance to this Faculty.

### *Courses Offered*

For the second consecutive year, there were students (three in number) returning from the Service and entering third year and who required courses totalling nine hours a week which would normally not have been offered in 1946-47. To enable these students to be graduated in 1947 instead of requiring them to wait an additional year, the courses were given. The greater part of this extra burden was carried by the over-town instructors.

All of the courses normally given were offered and in addition moot court arguments were held in which every student took part. Practising lawyers judge the second and third-year moots, while articled students at law and senior students from the Faculty judge the first-year moots. The quality of these arguments was very high. This training is a valuable part of legal education. In certain courses, viz., Practice and Real Property, instructors have arranged for their classes to visit the Land Titles Office and Court House to see the practical working of legal machinery. It was hoped to have Chief Justice Howson give a lecture or series of lectures on Legal Ethics but this had to be deferred until next session.

### *Curriculum*

No calendar changes were made. The Faculty is studying this question which is now under consideration by the Legal Section of the Canadian Bar Association. Regardless of what is done by that body this Faculty is making a complete survey of the subject and hopes to be able to revise the curriculum to make it conform to present-day needs.

### *Employment of Graduates*

The eleven graduating students are already placed in offices in Edmonton or Calgary. From inquiries made in recent months, it is clear that there are many

vacancies in law offices throughout the Province that cannot be filled. There is also a demand for law graduates by business concerns and governmental departments not only in Alberta but throughout Canada.

#### *Expected Enrolment for 1947-48*

It is impossible to tell as yet how many students will enter first-year Law next fall. Present indications are that there will be at least 35 and possibly 50. Even the former figure will be a considerable increase over any year in the Law School's history.

The present library space may be slightly congested and the demand on library books will be heavy but the Faculty is of the opinion that there will be ample accommodation for all students. The book shortage will be solved by requiring students to obtain 'case-books' in all courses for which they are available or can be made available.

#### *Conclusion*

Four-fifths of the students were ex-servicemen. These students continued to show the high calibre of work and seriousness of purpose that was in evidence last session.

### **Report of Dean J. J. Ower of the Faculty of Medicine**

As noted in the last annual report the acceleration of the courses in the Faculty of Medicine during the year necessitated a readjustment of the classes, with the result that in 1945-46 deceleration had produced the sequence elimination of one group (fourth year). This lack being carried into the session 1946-47 left the University without a graduating class in Medicine at this (1947) Convocation.

The outstanding event of the present session was the graduation of the last wartime accelerated class of 21 members, 3 women and 18 men, who received their degrees at a special Convocation on the evening of October 5th, 1946. On this occasion the University recognized the war-time contributions of two distinguished citizens, Mrs. Richard Procter and Dr. J. B. Collip, by bestowing on them the honorary degree of Doctor of Laws.

The resumption of regular classes in September, 1946, found the Faculty with a full complement of teachers in the clinical departments, as a result of the final return to duty of practically all members who had been in the Armed Forces. With the exception of Biochemistry, the preclinical departments are scantily staffed and there are several vacancies now and coming up, for which suitable personnel must be found. Considerable difficulty is being experienced in getting such replacements, due to the fact that during the course of the war practically all training of young staff members for these departments on this continent was suspended, and there are few candidates for the many openings caused by the necessary retirement of older staff members.

As a result of the farsightedness of the University authorities, research within the Faculty received a fillip in the form of the establishment of a Medical Faculty division of the newly created University of Alberta Foundation, bonused by a very generous basic allotment of funds and current income. As a response an active Medical Science Research Club was inaugurated early in the session for the purpose of stimulating, reviewing and assuring co-operation in locally projected medical research problems.



Specialized teaching for the fourth year was instituted in the Camsell Hospital and the Oliver Mental Hospital, and classes for the third year were initiated in the Royal Alexandra Hospital during the present session. Regular clinics for the fourth year were given for the first time this session in the Misericordia and Edmonton General Hospitals. It is clear that more and more use of these hospitals will have to be made to complement and relieve the pressure on the teaching facilities of the University Hospital, now considerably overtaxed.

In regard to postgraduate training activities undertaken by the Faculty of Medicine, the 15th annual refresher course, financed largely by the College of Physicians and Surgeons of Alberta, was successfully completed and attended by over one hundred and fifty doctors. The next course is being staged during the week of Convocation. In addition, a plan of graduate training for the Medical Specialties is being undertaken, with the approval of the Committee on Graduate Studies, for a limited group of trainees. An active interest on the part of D.V.A. authorities in regard to this training is to be reported.

The relationships between Staff and students have been at all times very good; the attitude and esprit de corps of the latter during this period have been all that could be desired.

### **Report of Miss H. E. Penhale, Director of the School of Nursing**

Annual reports help us to evaluate and appraise our work. What are our weaknesses and shortcomings and how can they be overcome? How well are we adjusting to the changing emphasis in nursing and in nursing education? These are but two of the criteria by which we measure the activities of the past and by which we chart the future.

The aim of the School of Nursing is to offer a well organized, integrated and carefully guided program of scientific, social and professional instruction and experience which will develop expertness in nursing care in the home, in the hospital and in the community.

As a first step toward accomplishing our aim the administrative set up of the School of Nursing was reorganized. Miss Helen E. Penhale was made Director of the School, with Miss Madeline L. McCulla, formerly Lecturer in Public Health Nursing, Miss Helen S. Peters, formerly Superintendent of Nurses, and Miss Margaret Wyld, Instructor in the Principles and Practices of Nursing, as assistants. In the new organization Miss McCulla became Assistant Professor of Nursing, and Miss Peters, Superintendent of Nursing Service. The newly created position—that of Supervisor of Instruction—will be filled by a new appointee.

Clinical instruction contributes much to the education of the student in nursing. In order to increase the professional instruction and experience instructors were appointed to the surgical, orthopedic and out-patient services. A clinical instructor is to be appointed to the operating room.

A post graduate course in Teaching and Supervision in Schools of Nursing was offered for the first time. It may be taken as a one year diploma course or as an option in the fifth year of the course leading to the degree of Bachelor of Science in Nursing. Ten students registered in the course—seven as degree and three as diploma students.

Twenty-five students were enrolled in the course Public Health Nursing. Nineteen of these were taking the one year diploma course, the remaining six the final year of the degree course.



A short course in examination techniques is being conducted in June under the auspices of the Alberta Association of Registered Nurses.

The members of the staff of the School of Nursing have assumed an active role in nursing activities in the province. Miss McCulla has been Chairman of the Nurse Practice Act Committee and Miss Penhale Chairman of the Educational Policy Committee.

All who are concerned with nursing education in the better schools of nursing are conscious of certain needed changes, namely, more recognition of the student nurse as a student; the need for mature and well prepared students; sufficient staff to provide guidance for students and better ward teaching; provision for affiliations in tuberculosis, psychiatric and public health nursing; and an increase in the number of graduate staff nurses in order that students' experience may be based on educational needs rather than hospital needs. We have made some progress; additional progress is anticipated.

**Report of Dr. M. J. Huston, Acting Director of the School of Pharmacy**

A total of one hundred students enrolled in the School of Pharmacy for the 1946-47 session. This is the largest Pharmacy class in the history of the University. Owing to the fact that there were many more applicants than could be accommodated, it was necessary to establish a quota in the first year of the course. Fifty students were accepted of whom forty-four presented themselves at the opening of classes.

In addition to the regular classes in Pharmacy, lectures in Materia Medica were again given to the nurses at the University Hospital.

To accommodate the large number of students, it was necessary to section all laboratory classes. Sufficient new space was obtained on the third floor of the Arts Building for an office and a library room. Arts 405 was redesigned to include a dispensing laboratory. The problem of space is, however, still acute.

Three graduate students are undertaking work towards M.Sc. degrees in this department.

The School of Pharmacy, with the Edmonton Retail Druggists' Association, sponsored a series of lectures on the "Science of Pharmacy." Eight meetings were held which were well attended by students and pharmacists. The School of Pharmacy also organized a two-day Refresher Course in connection with the annual meeting of the Alberta Pharmaceutical Association.

**Report of Dean J. MacDonald, Chairman of the School of Graduate Studies**

During the academic year 168 students were registered in the School of Graduate Studies.

This figure represents a substantial increase over the figures for last session, when the total registration was 101. The main reason for the increase is the very considerable number of ex-service personnel who are proceeding to higher degrees with the support of the Department of Veterans' Affairs.

The distribution of candidates according to departments has been as follows:

Animal Science .....	5
Applied Science .....	17

Bacteriology .....	1
Biochemistry .....	3
Chemistry .....	12
Dairying .....	2
Education .....	32
English .....	7
Entomology .....	1
History .....	8
Geology .....	6
Modern Languages .....	1
Pharmacy .....	3
Philosophy .....	11
Plant Science .....	10
Political Economy .....	6
Physics .....	7
Soils .....	3
Zoology .....	3
Special Grads. ....	30
	—
	168

## Report of Dr. P. S. Warren, Chairman of the Committee on Physical Education

### *Program of Physical Education*

In arranging a program of physical activities for students, the Committee on Physical Education has always kept two chief aims in view. Firstly, to promote physical health by developmental activities under strict supervision of qualified instructors. Secondly, to encourage all students to join various athletic clubs or enter other physical activities which will give the necessary relaxation from the mental strain of their academic studies. The developmental activities are confined largely to first year students, most of which have had little properly supervised physical education. Second year students are not supervised so closely but are required to take a minimum of three hours a week of physical exercise, usually through the athletic clubs where some supervision can be attained. Senior students are given all encouragement to take regular hours of physical exercise of some form but they are not supervised. Student veterans are not required to take physical education.

In addition to the regular program of Physical Education, the Committee has arranged with the Faculty of Education to take charge of some of the teacher training courses offered by that Faculty. Their professional courses are now being given by the Department of Physical Education.

### *Duties of the Department of Physical Education*

The program as outlined above was handled completely by the Department of Physical Education. It involved a total of 475 men and 311 women, broken down into 14 classes for men and 11 classes for women. It included students of four faculties, represented as follows:

Faculty of Arts and Science .....	478
Faculty of Applied Science .....	143

Faculty of Agriculture .....	70
Faculty of Medicine .....	95
Nurs. 82, Pharm. 12; Dent. 1).	

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786

The courses given in the Faculty of Education were Education 144 and Education 244. The enrolment in these courses was as follows:

Education 144 .....	12
Education 244 .....	3

Members of the Department were responsible for a good deal of the coaching in the sporting activities, such as rugby, basketball, track and swimming. The department, also, was responsible for directing a very successful Ballet performance staged under the authority of the Wauneita Society.

The total program was carried out by the three fulltime members of the Department and four student assistants. The Department had a busy and interesting year.

#### *Accommodation for the Required Program*

The accommodation provided for carrying out of the program of Physical Education is the University Drill Hall and Athabasca gymnasium. Most of the men's classes are held in the Drill Hall and the women's classes in Athabasca gymnasium. Teacher-training classes are given space in the Faculty of Education gymnasium.

The space so provided was adequate but was taxed to the limit. The use of the Drill Hall for examination purposes interfered with the later stages of training. This was unavoidable.

#### *University Athletic Board*

Hitherto the organization of the Athletic Association has been rather clumsy, with separate organizations for men's and women's athletics. It was felt that the two organizations should be fused and reduced in size for the more competent handling of all athletic activities. The new organization, known as the University Athletic Board, has been sanctioned by the Committee on Student Affairs. Under the new organization, the Head of the Department of Physical Education is Chairman of the Board and Executive Officer. The president of Men's Athletics is vice-chairman, the President of Women's Athletics is secretary; a student member is elected as treasurer and a Faculty representative is appointed by the President. The Board is responsible for its own finances, but reports to the Treasurer of the Students' Union. This organization has been tried out and found to be very successful. Much of the credit for this reorganization is due to Professor Van Vliet of the Department of Physical Education.

#### **Report of the Librarian, Miss Marjorie Sherlock**

The year 1946-47 has been the busiest in the history of the Library, with every member of the staff working under pressure to meet the increased demands of the teaching and research departments and the enlarged student body.

#### *Salary Schedule*

In March 1946 a revised salary schedule for the Library was approved by the Board of Governors. Members of the Library staff now have academic status and

their salaries are graded accordingly. This is a reform long needed, and one in which this University is leading the way for other Canadian universities.

### *Student Assistants*

Thirty-two student assistants were employed in the Library for varying periods weekly. In employing students it is the Library's policy to give preference first to those who intend to enter the library profession, so that their work here may give them preliminary training in their chosen field, and second to those students in need of financial assistance. This past year a number of students would have found it impossible to continue at the University without this additional income.

### *Quarters*

The problem of space to accommodate readers and books has become more serious than ever. In September 1946 it was necessary to take over the Men's Common Room in the Arts building as a Library study room, seating 85 readers. This, with the Main reading room and the various branch reading rooms, gives us a total of only 350 seats for a student body of over 4,000.

Work rooms for the staff are still crowded, but the situation was somewhat relieved in January 1947 by the generous action of the Wauneita Society in surrendering its Upper Common Room for library use until such time as the new library building is ready. With the removal into this room of the Cataloguing department—grown in 18 months from 2 to 6 assistants—it was possible to utilize its former quarters for a variety of "behind the scenes" activities, which had formerly been carried on in any available nook or corner of the stackroom.

In September 1946 a second Law Reading room, adjoining the former room, had to be provided and equipped, to accommodate 35 additional readers.

### *Book Storage*

The problem of book storage is a serious one. During the past year the Library added 5,000 volumes to its collection. Additional shelving was erected in the stackroom last Spring and it will now be necessary to build the stacks there up to the ceiling to shelve the 10,000 or more volumes which must be anticipated in the next two years before the new Library is ready.

### *Cataloguing and Orders*

This department has worked under extreme pressure during the year to meet the unusually heavy demands for new books and added copies, to reorganize branch libraries, and to bring files and records up to date. The Order work has been completely reorganized, and a clerical assistant added to the staff to assist the Order Librarian.

During 1946-47 the department ordered 3,738 titles; accessioned 4,819 volumes; catalogued 9,231 volumes (including 671 bound journals); lettered 8,853 volumes; withdrew 169 volumes; and typed 28,123 cards. The total volume of work for this year is slightly less than three times that for 1945-46. The Chief Cataloguer and an assistant spent May and June 1946 in the Calgary Education Library where they recatalogued 3,578 volumes. It is hoped that another two months' work this summer will complete the recataloguing of this library.

### *Reference, Circulation and Periodicals*

This department bore the brunt of the Library's heightened activities, with longer hours of opening and a greatly augmented service. Library hours were

from 7:45 a.m. to 5:30 p.m. and from 7-10 five evenings a week. During all these hours the Main Reading room was used to capacity. The daytime use of seats in the Library study room was 41,738.

*Reference and Periodicals* In addition to the reference service given to faculty and students, this department is responsible for periodicals, government documents and pamphlet material, inter-library loans, and for the binding of all books and journals. During the year 890 current periodicals were ordered and recorded; 885 volumes prepared for binding, 104 volumes were borrowed and 40 lent on inter-library loan, and 18 microfilms purchased for research purposes.

*Circulation.* Student borrowing from the library has more than doubled in the past year. Circulation figures for the main library are: volumes from the stacks for home use 16,411; reserve books for overnight use 17,311; reserve books for use in the Library 44,733; a total of 64,460. Six hundred and eighty-four loans were sent out by mail to 237 extramural students. Circulation for overnight use from the Agriculture reading room was 1,402.

#### *Branch Libraries*

*The Education Library (Calgary)* is being completely reorganized, and it is hoped that this work will be completed this summer. For the first time the Education Librarian carried out her duties on a full-time basis.

*The Education Library (Edmonton).* This library had a record year. The Education Librarian, with two full-time and one student assistants, circulated a total of 39,784 books to students—an average of 61 books for each student registered in the Faculty of Education. During the year 16,657 seats were used in the Education Library study-room.

*Medical Library.* This past year, Medical library hours have been extended to include the noon hour (from 7:45 a.m. to 5 p.m.) and 5 evenings a week from 7-10. One thousand, four hundred and fifty-one volumes were circulated to city and rural doctors. Circulation statistics from September 1 to March 31 are: reserve books for overnight use 2,960; stack-books for overnight use 1,723. The circulation of reserve books for use in the Library was also extremely heavy.

Through the Medical Library Exchange 838 items (mostly volumes of medical journals) were secured to fill in gaps in our files, and approximately 800 items, not needed by us, were sent to other libraries. At the present we are preparing a large shipment of duplicate journals for the American Book Center for War-devastated Libraries, which hopes to ship from one to three million volumes abroad in the next few years. Cost of our shipment is being borne by the University Library as part of its share in this important work.

#### *Radio Talks*

During the past winter members of the University Library staff again co-operated with the members of the Extension Library in presenting *Books at Random*, a series of weekly book talks, broadcast by the University over CKUA. A total of 29 broadcasts were given—20 by the University Library, and 9 by the Extension Library. Since each 15 minute broadcast requires a minimum of 15 hours of preparation, all of which is done outside of library hours, it is felt that this is a significant contribution by individual staff members to the University's extension work.



### *Library Course for Teachers*

During the Summer Session 1946 a course in Library science for teachers was offered by the Faculty of Education. Miss Louise Riley, of Calgary, was instructor in charge of the course, but the preliminary planning and arrangements were made by the University Librarian, and members of the University staff assisted in the instruction. It is hoped to offer this course again in 1948.

The Librarian wishes to express appreciation to members of the Faculty and students alike for the patience and unusual consideration for others which they have shown consistently in the Library during the past year; and particularly to the Library staff by whose loyal and unstinted efforts our service has been maintained in spite of difficulties.

### **Report of the Provost, Dr. P. S. Warren**

The 1946-47 University term has been a very arduous but interesting one for the Provost. The large number of students, with such diverse interests, at present on the Campus has led to a review of the whole organization of student activities and a certain amount of systematizing and reorganization was attempted. In this matter, the President of the Students' Union, Mr. Willard Pybus, gave his whole-hearted interest and support, and such headway that has been made in reorganization would have been impossible without his loyal co-operation, as well as his executive and organizing ability. Mr. Pybus received excellent and appreciative support from his Council throughout the year.

For a beginning, a list was drawn up of all student organizations or clubs known to exist on the campus which had official sanction or recognition from the Students' Union or other authority. The number of such organizations amounts to about 80. These organizations cover all fields of activities and include all sporting clubs and social clubs. The number will continue to grow rather than lessen and there are clubs in the formative stage at the present time. The clubs or societies may be divided roughly into two types—first, those that receive financial support from the Students' Union, and second, those that are self-supporting. They may be listed also as University, Faculty, Department, sporting, social, religious clubs, etc. All organizations or clubs are given implicit instructions regarding their responsibility for the behaviour or decorum of their members or guests at all functions given by the club or organization. The Provost has endeavoured to attend the major functions given by these organizations throughout the year.

The results of the year's activities of the organized student body have been remarkably successful. The sporting clubs won all the intercollegiate major awards, but lost out in quite a few of the minor activities. Curling and skiing were included in the intercollegiate meets this year and were well received. Such activities will continue to be attractive to many members of the student body.

The Literary Society showed some high points during the year. The Musical Association was particularly successful under the very forceful and skilful leadership of Gordon Clark. The Musical Club, the Mixed Chorus and the University Symphony reached a very high level of success and received many compliments from leading musicians in the Province. The Association will miss Gordon Clark's initiative, administrative ability, and high musical scholarship. The Dramatic Club had a very successful year with its usual program, but the Debating Club and Political Science Club have not as yet attained their pre-war standard.



This year the Ballet Club was formed under the sponsorship of the Wauneita Society and trained by Miss Stella Holosko of the Department of Physical Education. They gave a highly successful performance to a large and appreciative audience. This club will, undoubtedly, be a great asset to the Literary Association. Another venture this year was the Parliamentary Forum which got a late start but attracted the attention and ability of a considerable number of students. It is yet in its experimental stages and will probably be a considerable asset to students who wish to understand Parliamentary procedure and also provide an outlet for the activities of politically minded students.

The main reorganization carried out this year was that of the Athletic Association. This is described above in the report of the Chairman of the Committee on Physical Education.

Reorganization of the Literary Association will probably take place in the near future. The organization of this Association is much too loose and unwieldy, and the best results are not being obtained for this reason. This reorganization should be commenced next year and should proceed slowly.

Student discipline has been very well sustained throughout the year. Student self-government is being promoted on an ever-increasing scale and, with such a large percentage of older students present on the Campus, is very successful. It may be more difficult to attain the same measure of success when the rehabilitated students leave the University.

"The Gateway" has reached a high peak of endeavor this year under the excellent editorship of Mr. Tom Ford. Publication of the paper twice a week is hardly sufficient for the needs of the student body, as it is the only medium of communication among the student body. "The Alarm" published daily is hardly successful and it is doubtful if it has a big circulation among the student body.

In spite of the large number of student organizations on the campus, it is doubtful if much more than half the student body take much interest in extra-curricular activities. This is due, in part, to the large number of married veterans on the Campus and, in part, to the crowded conditions of the Campus. The large number of dances by various organizations is a striking feature of our present time, but it is probably a passing phase, due to the unsettled condition of world affairs. The craze appears to be world-wide and is certainly not confined to this University.

### **Report of the Director of Medical Services, Dr. John W. Scott**

The increased registration during the session 1946-47 has increased the scope of activities of the Student Medical Services with considerable increase in expenditures, both in the operation of the Infirmary and cases treated in the University Hospital.

We have been fortunate this year in not having any serious outbreak of communicable disease and the student health on the whole, has been good. Examination of new students, totalling 1,730, was carried out in September last. The tuberculosis division of the Provincial Government co-operated with us and carried out chest x-rays on the students as they reported for examination. We hope to be able to continue this in future years.

Dr. P. S. Warren, of the Medical Services Committee, has shown a very lively interest in this work and we have appreciated his wise judgment on many matters.

## **Report of the Adviser to Student Veterans, Dr. A. J. Cook**

The present Adviser took over his duties on May 1, 1946. Since then, the work has required steady attention.

The Advisory Service is part of an interlocking process which involves the Department of Veterans Affairs, district offices in Edmonton and Calgary, the C.V.T. Pre-matriculation Schools, the Pre-matriculation School Committee, the Examinations Branch, the Deans and Directors of Schools, the University Rehabilitation Committee, the Registrar and the Bursar.

### *Student Counselling*

Much of the work thus far has concerned veterans seeking to enter the University. Veterans in the Edmonton D.V.A. district are advised in close co-operation with the D.V.A. counsellors. Students in the Calgary district have been dealt with primarily by the Calgary D.V.A. counsellors. For September 1947 entrants, a checking procedure has been devised with the Calgary district, which is proving its worth in dealing with doubtful cases. Correspondence chiefly concerns veterans in rural districts.

During this session the senior D.V.A. counsellor has been available to students in the Rehabilitation office on three afternoons each week. Much joint counselling of students has been done in these periods, particularly for the student in serious difficulty with his course.

There have been relatively few "problem" cases. The D.V.A. psychiatric service has been useful as a medical check in these instances, and some students have been granted deferments for reasons of mental strain.

### *University Admissions*

The admission of veterans went forward without difficulty. The policy of this University of giving the veteran every possible chance for admission, by permitting him to write terminal tests for admission up to the last moment, has been a sound one. It has put considerable strain on the office staffs during September 1945 and 1946, but has been well worth the extra effort. The Canadian Vocational Training Branch, which operates the pre-matriculation schools, and the Examinations Branch of the Department of Education, co-operated splendidly in seeking to minimize the time of handling student transcripts.

Procedures for September 1947 have already been checked through with the Pre-matriculation School Committee. There appear to be about 650 active applications for September 1947 entrance. We can assume probably less than 400 actual admissions.

### *Pre-matriculation Schools*

There were three schools operating during 1946. The school at Red Deer was closed in November, and after August 1947, one school will be operated for one year, probably in Calgary.

Nearly 4,000 veterans have taken "placement tests" since the opening of the pre-matriculation schools in January 1945. These have served to screen out many veterans who were doubtful prospects for University training. This scheme is unique in Canada, and has served to minimize the entry of misfits into University courses.

A detailed analysis and follow-through is to be made of a random sample of 600 placement test records, the data being prepared for the pre-matriculation committee by C.V.T. A preliminary study made in the Calgary D.V.A. district shows clearly that men with low placement test scores failed to survive trial periods in academic work.

Refresher classes for matriculated students were held under C.V.T. auspices at Edmonton and Calgary last summer, in addition to the University refresher course held in September. These courses were greatly appreciated by the veterans.

#### *University Rehabilitation Committee*

The committee has met from time to time to clarify procedures within the University. The reporting of students to D.V.A. at the end of each session has been worked out in detail for the spring of 1947 following the lines of the procedures set up last May.

The committee accepted a report from the Adviser and the Assistant Registrar regarding a Student Employment Committee working in liason with the National Employment Service. This was approved by the President and has since been implemented.

#### *University Counsellors' Conference*

At the suggestion of D.V.A., an all Canadian University Counsellors' Conference took place at the University of British Columbia in the first week of August. The Director of Rehabilitation Courses, Professor E. H. Strickland, and the Adviser attended this conference. The conference was of value in seeing how other institutions were handling the emergency problems. Thus it became clear that the housing of veterans at Alberta was in better shape as of August 1946 than at any other University. Our Counselling schemes stood up well in comparison with the schemes used elsewhere, despite what appear to be certain defects in our procedures.

#### *Student Veteran Loan Board*

The plan of student veteran loans for emergency needs was set into operation in the present session. Thus far there have been 29 loans granted, a total of \$5,645. Four applications were not accepted for various reasons. In addition, a few first year student veterans were helped in emergencies from a University loan fund made temporarily available.

It is clear that the student veteran is using good sense and discretion in using the loan scheme.

#### *The Mooted January 1947 Session*

The Adviser visited the three pre-matriculation schools in September after a definite announcement had been made that there was to be no January 1947 session. It is apparent that this decision was a wise one. The veterans in consequence took more time to study in the pre-matriculation schools. Relatively few admissions were made for September 1947 entrance during January and February.

In conclusion, it is a pleasure to record appreciation: first, of the student veteran, who has accepted cheerfully the sometimes difficult conditions under which he has had to work. As in war, so in post-war, he is showing soundness of makeup, and has thoroughly justified the splendid vision of those responsible for the Dominion Training Program. Second, of those officials and staff, both without and within the University, who have shown such sympathy and understanding in dealing with the various aspects of the present campus emergency.

## **Report of the Officer Commanding C.O.T.C., Lt.-Col. F. Owen**

Overall establishment has been set at 4 officers and 120 cadets. The quota for 1946-47 was limited to 97 cadets, distributed according to the need in the different Corps.

The cadets go to training camps for from 16-18 weeks during May. These training camps are under the direction of the Active Army. The cadets rank as cadet officers. Pay is at the rate of \$135.00 per month in addition to accommodation and medical service.

Officers on strength during the session were: Lieut-Col. F. Owen, O.C.; Maj. C. E. B. Conybeare; Maj. D. F. Cameron (not active); Capt. S. J. Cornish. The Resident Staff Officer for the year was Maj. M. Egan, M.A.

Selection was made on the basis of academic standing, M tests, medical examination, nature of studies at university and general suitability.

Lieut.-Col. Owen is retiring from the command this spring, and Major M. L. Van Vliet has been recommended to succeed to the command.

Training this session has consisted of lectures on Military Science. During 1947-48 these lectures will be continued. Lectures will also be given on Military Geography and Military Economics, a total of 40 hours during the term. These lectures will be given by members of the University Staff. In the following year lectures will be given on Military History.

The training qualifies the cadets for commissions as Lieutenants in the Reserve Army on graduation. A third year of practical training may be taken which qualifies for the rank of Captain in the Reserve Army or Lieutenant in the Active Army.

## **Report of the Commanding Officer U.N.T.D., Lieut. G. F. Dalsin**

At the opening of the current session there was a considerable decrease in the enrollment in the U.N.T.D. as compared with last year. However, this was to be expected when the participation in services training was put on a voluntary basis. At the end of the 1945-46 session the active enrollment was about 120. In October 1946, there were applications from about 20 of last year's members and approximately 30 new applicants. Because of screening, medical disability, and in some cases lack of interest, this number has been reduced throughout the year.

At present there is an active enrollment of 33 in the unit, of which 9 are in first year training, 18 are in second year and 6 are in third year. Of the second and third year men, 21 are now rated as Officer Candidates. In the Officer Candidate group, 12 are candidates for Executive Commissions, 4 for Engineering or Electrical Commissions and 5 for Commissions in Supply and Secretariat. The present maximum U.N.T.D. complement set for the University of Alberta is 65.

Training throughout the year has been carried out at H.M.C.S. Nonsuch, parades being held on Monday nights from 7:30 to 10:30. The training program requires a minimum of 60 hours for the session, so there have been 20 scheduled parades. Instructors and training equipment have been provided by H.M.C.S. Nonsuch permanent and reserve staff.

The only activity, other than regular parades, in which the unit participated was the ceremony in connection with the opening of parliament on February 20. At this time the unit provided the majority of personnel in the naval guard of

honor. From all reports, it appears that the ratings carried out their drill in a most satisfactory manner.

Plans for spring and summer training are now being completed. All members of the unit will take two weeks Naval Training during May or at some later date. It is anticipated that the Uganda, Crescent and Charlottetown will be available for U.N.T.D. training in May. All cruises are scheduled with Alaska as destination. Most of the Officer Candidates are intending to take voluntary training during the summer. This is a necessary part of each Officer Candidate's training for at least one summer as an undergraduate.

The morale of the unit has improved much over what it was last year. The organization and standard of instruction has been much better. It is now felt that the unit is a nucleus from which there should be a healthy growth.

### **Report of the Director of the Summer Session, Dr. H. E. Smith**

#### *Faculty*

The summer session faculty numbered eighty-six instructors, assisted by a small staff of readers and demonstrators. Eight of our faculty members were teaching in Calgary on the Industrial Arts program.

Of thirty-five teaching personnel not on the regular staff of the University, the following were from points outside of Alberta:

- (1) Mr. Eugene Davis, Cleveland, who again gave generously of his time and talent to large classes in Dramatics.
- (2) Dr. Aileen Dunham of Wooster, Ohio, offering a course in International Affairs.
- (3) Miss Jean Forster from the staff of the University of Toronto. Miss Forster offered a course in "The Dance" as part of our Physical Education program. In addition to her regular duties Miss Forster conducted a volunteer class in dancing each Monday from 7-8 p.m. in the Education gymnasium.
- (4) Professor J. E. L. Graham of United College, Winnipeg, gave our regular course in Money and Banking.
- (5) The services of Mrs. T. Green of the Vancouver city staff were secured for the lecture part of H.Ec. 43. Miss M. V. White of Minneapolis and Winnipeg supervised the laboratory work.
- (6) We were very fortunate in having Professor R. S. Knox of University College, Toronto, to give a large summer session class the benefit of a master's interpretation of Shakespeare through the medium of English 53.
- (7) Dr. E. T. Michell in Philosophy, and Dr. Esther Prevey in the field of child psychology, renewed old friends and made many new friends on the campus.
- (8) In the Department of Fine Arts Mr. R. Eaton and Mr. F. Hubble have administered the two comprehensive courses, Music 41 and 51, offered for the first time in our summer session. In the absence of Professor Reymes-King, Mr. Eaton acted as head of the Department.

#### *Courses*

The new course in School Libraries under the direction of Miss Riley proved very popular. Fifty-five students were enrolled. Miss Cooper of the Edmonton



Public Library, and Miss Clever from the Education library, assisted for short periods in some specialized phases of the course. Should the course be offered again, it might be more widely advertised throughout the Prairie Provinces.

Another new course, Principles and Practices of Pupil Guidance, taught by Mr. Panabaker, was offered in the light of an increasing public interest in guidance services. Calgary and Edmonton and the Sturgeon School Division have recently appointed guidance officers. The Minister of Education is now proposing the appointment of a provincial officer.

Our music courses, 41 and 51, have I think been very successful. In the absence of Professor Reymes-King, Mr. Eaton and Mr. Hubble together with a staff of five assistants have conducted the work effectively and acceptably. Admittedly the courses have been heavy and rather costly. Students have found the time requirements definitely onerous but agree that the training has been excellent. In future years specific laboratory periods should be listed in the Announcements so that students will know what to expect. In addition a laboratory fee should be exacted of music students, as a minimum the usual five dollars, and possibly as much as ten dollars. Apparently a large staff is required, and the outlay for instruments and materials is far in excess of that required for other courses.

The Industrial Arts courses offered again this year in Calgary were also costly. Eight instructors were required for seven courses registering in all only forty-five students. The nature of the work demands long hours of laboratory instruction, a considerable amount of equipment and supplies, and an assistant director to handle business matters. The total expenditure this year was approximately \$3,500. It is suggested that the course offerings for the 1947 session might be somewhat reduced. The Director spent two days in Calgary, first in February to make staff arrangements, and again in July on a tour of inspection. In his opinion the courses were handled most effectively and the students were appreciative of the services made available to them.

In all sixty-eight summer session courses were offered by eighty-six instructors. The nine war-emergency courses required two instructors each (300 students taking each course) and assistant instructors were engaged for music, household economics, dramatics, and automotives. Demonstrators and readers numbered approximately twenty-four. With all of these persons it has been a pleasure to work and to them I am indebted for their steady and whole-hearted co-operation.

### *Student Affairs*

The student affairs of the Session are now to a considerable extent regulated by tradition and run smoothly. The two assembly meetings were convened at 4 p.m. on July 8 and August 8, in this way reducing to a minimum the amount of class dislocation. Good attendances were reported for both meetings.

Student sponsored activities are probably as numerous and as well diversified as they should be. No complaints have been heard. The dance evenings were costly, especially when held in the Drill Hall. However this summer the Drill Hall was not available for use until July 19 and only four dances were held there. The others were held in the Education Building Gymnasium. The Director has suggested to the Council the possibility that dances might be restricted to one per week, or alternatively that a small charge might be made for admission. An excessively large part of student funds is spent on this one form of entertainment, a type of entertainment in which a good number of students cannot participate.



The usual variety of athletic events, picture shows, picnics, and the like, was provided.

Student life in the residences was made very attractive through the wardenship of Miss Simpson and Miss Doris Sheppard. Both are persons of great talent in organization and leadership.

As advisers to women and men students respectively Miss Simpson and Mr. Doucette were very well cast. The amount of "advising" they have to do is probably small, but their presence at student functions is stimulating as well as regulative. A good measure of educative work is done incidentally in setting and inculcating standards of behaviour.

In conclusion may I express to the President my appreciation of his continued confidence and support, and to my successor in office my willingness to give him whatever assistance he may require.

## Report of the Director of the Department of Extension, Mr. Donald Cameron

### Statistical Survey

#### *Lectures*

University teaching staff .....	306	
Department of Extension staff .....	135	
Aggregate attendance .....		32,147
Number of radio talks .....	216	

#### *Conferences and Short Courses*

University Week for Farm Young People .....	275	
University Short Course for Appraisers and Settlement Supervisors under V.L.A. ....	160	
Refresher Course in Sanitary Inspection .....	24	
Refresher Course in School Administration .....	72	
Refresher Course in Municipal Administration .....	76	
Community Life Conferences:		
Joussard (Lesser Slave Lake) .....	100	
Lake Saskatoon .....	55	
University Short Course and Co-op Conference .....	65	
Agricultural Short Course for Imperial Oil Fieldmen ....	18	
Community Art Schools:		
Lethbridge Extension Class in Art—Summer Session ...	19	
Lethbridge Extension Class in Art—Winter and Spring term .....	25	
University of Alberta Extension Class in Art, Edmonton:		
Fall .....	36	
Winter .....	32	
University Extension Class in Art—Medicine Hat .....	33	
University Extension Class in Art—High River .....	17	
University Extension Class in Weaving .....	18	
University Extension Class in Leathercraft:		
Fall .....	23	
Winter .....	7	

Refresher Course in Pharmacy .....	100	
Refresher Course in Medicine .....	150	
Banff School of Fine Arts .....	568	
	<hr/>	
Aggregate Attendance .....		1,873
<i>Visual Instruction</i>		
Number of times lanterns loaned .....	51	
Filmslide and miniature projectors loaned .....	42	
Sets of lantern slides sent out .....	431	
Sets of miniature slides sent out .....	88	
Number of times slides used .....	739	
Aggregate attendance lantern lectures .....		32,836
Filmslides sent out .....	1,688	
No. of times filmslides used .....	2,139	
Aggregate attendance, filmslides .....		66,406
Sets of moving picture films sent out .....	3,081	
Number of reels in sets sent out .....	12,022	
Number of showings given .....	4,590	
Aggregate attendance, moving pictures .....		417,887
Branch Library film showings .....	854	
Aggregate attendance, Br. Library film showings .....		70,945
<i>Library and Debating Service</i>		
Number of travelling libraries in use .....	92	
Number of times sent out .....	208	
Recorded circulation .....		8,566
Number of Special Libraries sent out .....	79	
Open Shelf Circulation:		
Books (including Special Libraries) .....	41,944	
Pamphlets and clippings .....	1,650	
Periodicals .....	3,577	
Plays .....	2,615	
	<hr/>	49,786
Number of package libraries for debaters sent out .....		120
<i>Study Group Material</i>		
Number of sets of Citizens Forum Bulletins sent out .....	110	
Number of sets of other study group courses sent out .....	25	
	<hr/>	135
<i>New Canadian Plays</i>		
Number of copies of New Canadian Plays sold .....		450
<i>Publications</i>		
Press Bulletin circulation (one issue) .....		7,500
Agricultural publications:		
Bulletins sent out during the year .....	25,195	
Mimeographed circulars sent out during the year .....	800	
	<hr/>	25,995
Total number of bulletins distributed since inception of service .....		412,431

#### University News Letter:

Number of issues .....	3	
Circulation 350 persons x 3 .....		1,060

#### Stage Door:

Number of issues .....	1	
Circulation .....		500

#### Recapitulation

Total aggregate attendance at lectures, conferences and short courses, lantern slide lectures, filmslide programmes, moving pictures .....	622,094
Total circulation of travelling libraries, books, pamphlets, periodicals, plays, study group material, package libraries, New Canadian plays .....	59,057
Total circulation of Press Bulletin, Agricultural Publications, News Letter, Stage Door .....	35,045

#### Conclusion

The 34th Annual Report\* marks the end of our first full peace-time year since the second World War. As has been the case following previous wars, the years immediately following were times of disillusionment and struggle. This time is no exception. The high hopes and idealism of the war years, inspired by a common sense of danger, has given way to national and sectional bickerings, jealousies and misunderstandings. Greed and selfishness, hate and despair spread confusion, doubt and insecurity throughout the world. In such a time the role of the University "searching for whatsoever things are true" is vitally important. By bringing truth and reason, tolerance and humanity to bear on the problems of the day, the University can play a decisive role in bringing about that better world which all hope to see.

#### Report of the Director of the Provincial Laboratory of Public Health, Dr. R. M. Shaw

Contrary to expectations that work in the laboratory would diminish with the cessation of hostilities and the conclusion of demobilization, the number of specimens received and examined considerably increased. Examinations made during the year ending December 31st, 1946, numbered 176,417 compared with 146,593 in 1945, an increase of 20 percent.

The greatest advances were made in surgical pathology, routine bacteriology and the various tests for venereal disease control. With respect to the latter, some tests formerly done only when asked for by the physician are now made routinely as a result of a request from the Dominion Council of Venereal Disease Control endorsed by the Dominion Council of Health. Such tests include a special Kahn procedure to estimate quantitatively the reactivity of positive sera and quantitative complement-fixation tests on cerebrospinal fluids. Since these laboratory examinations offered more aid in the diagnosis of difficult cases and in the evaluation of the effects of treatment, all Provincial Laboratories agreed to give the service routinely.

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\*The complete Annual Report on Extension Activities of the University of Alberta for the Year ending March 31st, 1947, which includes a report on the 1946 Session of the Banff School of Fine Arts, is available in printed form.

The advances in medical science frequently make it necessary for laboratories to extend their services in order that the new discoveries may be used to the greatest advantage. As examples, may be cited the need frequently to determine whether a particular infection is likely to respond to treatment with one or other of the new antibiotics, penicillin or streptomycin. Further, when such drugs are being used, it may be desirable to know the blood levels reached and maintained during their administration. Such tests come within the scope of the bacteriologist and are being asked for more and more frequently.

The discovery, in 1940, of the Rh factor in human red blood cells and the demonstration of its importance as a cause of reaction in blood transfusions and of certain abnormalities of pregnancy and of the newborn have shown the need for more extensive blood testing and the necessity for more careful selection of blood donors for transfusions particularly for girls and young women. Since October 1946 the Provincial Laboratory has undertaken to give service in this respect and now performs five hundred tests per month although only 622 tests were made in the last three months of the year under report.

The usual investigations were made with respect to acute infections.

The large number of students who entered the university subsequent to demobilization brought about a state of overcrowding in the lower floors of the east wing of the Medical Building and made it necessary to seek new quarters for a part of the staff of the Provincial Laboratory. An army hut was secured and established on the south side of 89th avenue immediately in front of the Medical Building. This was occupied in October 1946 and gave three thousand square feet of floor space. Into it were moved the routine clinical and part of the public health section of bacteriology, the section doing serological tests for syphilis, the section on mycology and of course the ancillary services for wash-up and sterilization. Such a move entailed the securing of new expensive equipment, much of which duplicated that used in the main building but which could not be transferred because it was still required in the teaching services and to serve the section of the laboratory still remaining in the old location. The Department of Veterans' Affairs kindly loaned some equipment until new became available.

The division of the laboratory into two parts required an increase in staff and created some administrative difficulties but on the whole was beneficial and permitted the maintenance of a satisfactory service to the public as well as easing the overcrowding in the teaching departments.

In May 1946, the Dominion Department of Health called the second meeting of Directors of Provincial Laboratories in Ottawa. Dr. Gibbons, Chief of the Laboratory of Hygiene, occupied the chair. The aim of these meetings is to bring about a standardization of methods and uniformity of reporting results by Provincial Laboratories across Canada. The Dominion Department also is desirous to co-operate much more fully than in the past through the Laboratory of Hygiene. During the past three years reagents for serological tests for syphilis have been prepared and distributed without charge to all Provincial Laboratories. Co-operation in the typing of freshly isolated strains of streptococci and diphtheria bacilli is also offered and accepted. Some steps have also been made in providing diagnostic aid in virus diseases, problems which as yet most Provincial Laboratories have no facilities, staff or equipment to undertake.

During the spring of 1946 we were considerably disturbed by the resignation of an unusually high percentage of our technical staff. Some of these members

had five to nine years' continuous service and equivalently experienced personnel were not available for replacement. New members selected from along recent graduates of the University have laboured diligently and have made great headway in filling the vacancies made by last year's resignations.

It is a pleasure to record that all members, both new and old, have given cheerful and faithful service throughout the year.

**Table XIII.—Commercial Value of Work if Minimum Charge Were Made in 1946**

Sputum examinations .....	768	\$ 1.00	\$ 768.00
Diphtheria and Haemolytic Streptococci ...	1,788	1.00	1,788.00
Typhoid Fever .....	881	1.00	881.00
Milk .....	912	3.00	2,736.00
Water .....	3,188	10.00	31,880.00
Guinea pig inoculations .....	911	3.00	2,733.00
Miscellaneous .....	5,685	3.00	17,055.00
Plasma cultures .....	150	.25	37.50
Urinalysis .....	34	1.00	34.00
Medico-legal (Blood, seminal etc.) .....	9	5.00	45.00
Cerebro-spinal fluids for Wassermann test	3,097	1.00	3,097.00
Bloods for the Wassermann test .....	9,221	1.00	9,221.00
Bloods for the Quantitative Kahn test .....	1,556	.....	.....
Bloods for the Standard Kahn Test .....	8,697	1.00	8,697.00
Bloods for the Presumptive Kahn Test .....	99,009	1.00	99,009.00
Bloods for Rh factor .....	622	.50	311.00
Smears for Gonococcus .....	17,577	1.00	17,577.00
Cultures for Gonococcus .....	5,289	1.00	5,289.00
Van Den Bergh determinations .....	288	1.00	288.00
Pathological Histological Material .....	9,321	5.00	46,605.00
Blood Smear examinations .....	154	2.00	308.00
Ascheim Zondek tests .....	383	5.00	1,915.00
Comparative series .....	41	3.00	123.00
Cerebro-spinal fluid (Colloidal Gold, Pandy) .....	3,284	2.00	6,568.00
Bacteriological examinations (P.M.) .....	89	5.00	445.00
B. abortus examinations .....	881	.50	440.50
B. tularensis examinations .....	881	.50	440.50
Cattle Blood examinations .....	1,421	.10	142.10
Autogenous Vaccine .....	23	5.00	115.00
Stock Vaccine .....	3	3.50	10.50
<b>Total .....</b>			<b>\$258,559.10</b>

### **Report of the Director of the Provincial Industrial Laboratory, Mr. J. A. Kelso**

During the year the Laboratory carried out 5,076 examinations and analyses, as compared with 3,790 for the previous year. An indication of the wide variety of this work is given by the following list of the materials most frequently analysed or tested:

	No. of analyses or examinations
Human blood .....	50
Brains .....	35
Coal .....	35
Egg melange .....	56
Animal feed .....	70

Flour .....	31
Gasoline .....	27
Honey .....	60
Industrial chemicals .....	39
Liquor .....	304
Liver .....	31
Milk .....	58
Narcotic drug exhibits .....	94
Ore .....	390
Quinine .....	25
Sterilizing solutions .....	157
Human stomachs .....	61
Animal stomachs .....	56
Water .....	809
Wheat .....	168
Urine .....	38
Concrete blocks .....	36
Concrete test cylinders .....	1,585
Electricians' gloves .....	97

Certain items such as engineering and electrical materials were handled in conjunction with Departments of Civil and Electrical Engineering and arrangements with such departments are working very satisfactorily. We have worked in co-operation with the Alberta Research Council, particularly the Gasoline and Oil Testing Laboratory. The Provincial Analyst is called on to give court evidence under Dominion and Provincial Acts and regulations. He must personally make his own analyses on such prosecutions.

Investigations were carried out for various Government departments, particularly Attorney General, Provincial Secretary (Fuel Oil Tax Act), Department of Agriculture, and Alberta Liquor Control Board, the latter requiring inspection and sampling of Alberta breweries.

For the past year the Provincial Analyst has worked in conjunction with Provincial Department of Health, Workmen's Compensation Board and Dominion Department of National Health and Welfare with regard to investigations the Industrial Health Division of the latter have been carrying on in Alberta, particularly on silicosis.

Required analyses, etc., were made for the R.C.M.P. and other police forces in the province.







REPORT  
OF  
THE GOVERNORS  
OF THE  
UNIVERSITY OF ALBERTA  
1947-48

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*To the Lieutenant Governor in Council*

SIR:

On behalf of the Governors of the University of Alberta, and in accordance with Section 28 of an Act respecting the University of Alberta, the undersigned have the honour to transmit through the Minister of Education the Report of the University of Alberta, setting forth the revenues and expenditures for the year ending March 31st, 1948, and the investments as they stood at the end of the fiscal year.

Appended to this report is the Report of the President of the University, in which the academic work of the University for the year, July 1st, 1947, to June 30th, 1948, is dealt with in detail.

H. H. PARLEE, *Chairman*

ROBERT NEWTON, *President*

November 30, 1948



# Financial Statements

STATEMENT A

## UNIVERSITY OF ALBERTA

BALANCE SHEET AS AT MARCH 31, 1948

### ASSETS

#### FIXED:

Buildings and equipment in service:

Land, buildings and plant, Schedule No. 1 .....	\$5,489,450.91
Furnishings and equipment, Schedule No. 2 .....	1,454,124.88

\$6,943,575.79

#### CURRENT:

Cash on hand and in bank .....	\$ 110,019.38
--------------------------------	---------------

Accounts receivable:

Sundry debtors .....	\$ 69,714.28
Less: Reserve for doubtful accounts .....	2,500.00

\$ 67,214.28

Government of the Province of Alberta re medical and library buildings .....

167,277.60

234,491.88

Accrued interest .....	4,241.67
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Merchandise held for resale, Schedule No. 4 .....	82,993.56
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Dominion of Canada bonds .....	10,000.00
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441,746.49

#### PREPAID EXPENSES:

Supplies on hand, Schedule No. 4 .....	\$ 44,335.61
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Unexpired insurance .....	14,718.82
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Legal retainer fee .....	375.00
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Unemployment insurance stamps .....	179.02
-------------------------------------	--------

59,608.45

#### OTHER ASSETS:

Livestock inventory .....	\$ 24,140.50
---------------------------	--------------

Deposit, Workmen's Compensation Board .....	8,564.00
---	----------

32,704.50

#### TRUST:

Investments, Schedule No. 5:

	Par Value	Book Value
Dominion of Canada bonds .....	\$ 420,200.00	\$ 426,868.69
Province of Alberta debentures .....	685,600.00	685,870.32
Province of Alberta special adjustment coupons .....	43,163.91	40,820.96
Preferred shares .....	500.00	500.00

\$1,149,463.91

\$1,154,059.97

Cash on hand and in bank .....	195,815.49
--------------------------------	------------

Due from general account .....	77,469.93
--------------------------------	-----------

Debenture interest receivable, deferred .....	74,375.25
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Loans receivable .....	27,275.37
------------------------	-----------

Mortgages receivable .....	6,873.87
----------------------------	----------

Real estate and shares, nominal value .....	11.00
---	-------

1,535,880.88

\$9,013,516.11



# LIABILITIES

## CAPITAL AND SURPLUS:

Advanced by the Government of the Province of Alberta .....	\$6,017,802.43	
Capital surplus .....	997,978.51	
		<u>\$7,015,780.94</u>

## CURRENT:

Imperial Bank of Canada loan .....	\$ 12,000.00	
Cafeteria tickets outstanding .....	1,452.44	
Accounts payable .....	234,466.56	
Due to trust account .....	77,469.93	
		<u>325,388.93</u>

## DEFERRED INCOME:

Fees .....	\$ 8,897.50	
Other .....	1,500.00	
		<u>10,397.50</u>

## RESERVES:

Unexpended library fees and donations .....	\$ 32,086.34	
Premium on Rockefeller endowment .....	18,221.66	
Workmen's Compensation Board .....	12,064.93	
Blood plasma unit .....	10,000.00	
Rink repairs .....	9,867.06	
Repairs and replacements .....	8,876.11	
Preliminary building expenses, architect .....	3,085.58	
Unexpended University Athletic Board fees .....	2,082.78	
Operating .....	29,783.40	
		<u>126,067.86</u>

## TRUST:

General endowment Rockefeller Foundation .....	\$ 500,000.00	
Scholarships:		
Escheated estates .....	\$273,711.67	
General .....	179,538.07	
		<u>453,249.74</u>
Research .....	264,582.30	
Pensions .....	46,961.29	
Student grants and loans .....	35,416.18	
General educational purposes .....	24,947.92	
Sundry .....	57,500.36	
Amounts administered or held for affiliated organizations and others .....	153,223.09	
		<u>1,535,880.88</u>
		<u><u>\$9,013,516.11</u></u>

Edmonton, Alberta, August 5, 1948.

I have audited the books and records of the University of Alberta for the year ended March 31, 1948.

Operations for the year under review resulted in a net deficit of \$1,937.94 after providing from current revenues for new buildings and equipment at a cost of \$337,873.47. Details of operations are shown on Statement B, and accompanying schedules.

The normal schools at Calgary and Edmonton and summer school formerly under the jurisdiction of the Department of Education of the Province were, as previously reported, transferred to the University as from April 1, 1945. All expenditures in connection therewith are shown in the attached statements except for maintenance and upkeep of buildings which has been provided by the Province direct.

### Financial Position

Buildings, plant, furnishings and equipment are stated on the Balance Sheet at original cost. No provision has been made for depreciation but University officials are of the opinion that the value of furnishings and equipment has been maintained by additions and renewals from revenue and reserve accounts.

Inventories of merchandise for re-sale and supplies on hand are certified as to quantities and prices by officials of the University.

Past due principal on mortgages receivable amounted to \$2,214.00 as at the date of the Balance Sheet.

Capital and surplus transactions during the year are summarized hereunder:

Capital advanced by the Government of the

Province of Alberta:

Balance as at April 1, 1947 .....	\$5,366,747.89	
Add:		
Medical building additions .....	424,457.60	
Library construction .....	113,316.00	
Advance for equipment .....	76,000.00	
Paving .....	33,360.40	
Implementation of guarantee .....	3,000.00	
Threshing machine shed .....	920.54	
		\$6,017,802.43

Capital surplus:

Balance as at April 1, 1947 .....	\$ 585,947.26	
Add:		
Expenditure on staff suites .....	54,308.42	
Income contributions:		
Library .....	19,849.36	
Buildings and equipment .....	337,873.47	
		997,978.51
		<u>\$7,015,780.94</u>

Subject to the foregoing remarks, I certify that, in my opinion, the above Balance Sheet is properly drawn up so as to show the financial position of the University of Alberta as at March 31, 1948, according to information and explanations given to me and as shown by the books of the University, and the accompanying Statement of Revenue and Expenditure correctly sets forth the result of operations for the year ended at that date.

C. K. HUCKVALE, C.A.

Provincial Auditor

UNIVERSITY OF ALBERTA  
STATEMENT OF REVENUE AND EXPENDITURE  
FOR THE YEAR ENDED MARCH 31, 1948

## REVENUE

Grants:		
Province of Alberta:		
General .....	\$ 972,339.99	
Supplementary .....	5,000.00	
Debt charges, see contra .....	198,768.01	
	<u>\$1,176,108.00</u>	
Dominion of Canada:		
Department of Veterans' Affairs, supplementary grant re rehabilitation students .....	334,589.43	
		<u>\$1,510,697.43</u>
Fees:		
Tuition, Schedule No. 7 .....	\$ 661,249.29	
Examination and special, net, Schedule No. 8 .....	3,411.65	
		<u>664,660.94</u>
Interest on Rockefeller Foundation endowment .....	\$ 17,500.00	
Deduct: Transferred to medical research trust .....	5,000.00	
		<u>12,500.00</u>
Library fees, see contra .....		23,891.17
University Athletic Board fees, see contra .....		21,794.48
Operating departments net revenue, Schedule No. 9...		<u>6,268.11</u>
		<u>\$2,239,812.13</u>

## EXPENDITURE

Instructional expense:		
Instructional salaries and direct expenses, net, Schedule No. 10 .....	\$1,170,136.33	
Maintenance of buildings, Schedule No. 11 .....	169,198.58	
Administrative salaries and expenses, Schedule No. 12 .....	76,167.45	
Library salaries and expenses, Schedule No. 13 .....	44,286.45	
Upkeep of grounds, Schedule No. 14 .....	29,188.13	
Provision for library accessions, see contra .....	23,891.17	
Provision for University Athletic Board expenses, see contra .....	21,794.48	
Pensions arrears, Schedule No. 15 .....	7,014.01	
Calendars and scientific publications, Schedule No. 16 .....	6,656.39	
Alumni office, Schedule No. 17 .....	4,785.73	
Provost's office, Schedule No. 18 .....	4,649.77	
Veteran counselling, Schedule No. 19 .....	4,487.06	
Sundry, Schedule No. 20 .....	4,029.89	
		<u>\$1,566,285.44</u>
Public service departments net expenditure, Schedule No. 21 .....		138,823.15
Debt charges, see contra .....		<u>198,768.01</u>
		<u>\$1,903,876.60</u>
Surplus for the year ended March 31, 1948, before providing for expenditure on new buildings and equipment.....		
Buildings and equipment purchased from income, Schedule No. 6...	\$ 335,935.53	
		<u>337,873.47</u>
Net deficit for the year ended March 31, 1948, transferred to operating reserve .....		
	\$	<u>1,937.94</u>

UNIVERSITY OF ALBERTA  
STATEMENT OF OPERATING RESERVE  
FOR THE YEAR ENDED MARCH 31, 1948

STATEMENT C

Balance as at April 1, 1947 .....		\$ 28,348.92
Add:		
Adjustments of previous years' transactions, net...	\$ 320.29	
Faculty houses reserve, unexpended balance .....	\$ 3,052.13	
		<u>3,372.42</u>
		\$ 31,721.34
Deduct:		
Net deficit for the year ended March 31, 1948.....		1,937.94
Balance as at March 31, 1948 .....		<u>\$ 29,783.40</u>

*To the Governors of the  
University of Alberta*

GENTLEMEN:

I have the honour to submit the following report on the work of the University of Alberta for the year ending June 30th, 1948.

ROBERT NEWTON  
*President*

# *The Report of the President*

*As presented to Convocation, October 18, 1947*

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As foreshadowed in my annual report last spring, we have entered upon the session of 1947-48 with the largest registration in the history of the University of Alberta. This university, in common with some others in this country, has this year not far from three times as many students as before the war. The post-war rush of student veterans is now subsiding, and we may perhaps settle down to a total registration about twice the pre-war size, before we resume normal and more gradual growth.

Doubling the student numbers requires of course the doubling of building accommodation and staff numbers. I am glad to acknowledge the generous support of our Provincial Government and Legislature in providing the wherewithal. The new West Wing of the Medical Building is now being occupied by the Departments of Chemistry, Biochemistry, and Chemical Engineering. The East Wing is closed in, and a year hence should bring relief to other crowded departments. The Library building, sorely needed by every department in the University, has been started, and should be available for use by the fall of 1949. Other projects we hope may follow in due course. Meanwhile all buildings, both of the academic campus and the hospital campus, are being made more accessible by a paving programme, which also mitigates the dust nuisance that had been a hazard both to health and to the accuracy of laboratory experiments.

I should call your attention to the rebuilt and enlarged University Memorial Organ, which in its new form is being used for the first time this afternoon. This truly inspired gift of alumni and friends in 1923-24 has benefitted every class passing through the University since, and at the same time has reminded us constantly of the debt we owe to those who gave their lives to protect our freedom. After 23 years of service, the organ required to be taken apart for cleaning, and we took the opportunity to add certain features which experience had shown were needed to make it a really great instrument, fully worthy of the high purpose to which it is dedicated.

This fall convocation differs from most of those held at various times other than in May during the past several years. Those were in the main to confer degrees on graduates of accelerated courses in Medicine and Dentistry. This one inaugurates what we expect to be a series of regular fall convocations with two main purposes: (1) to take care of the increasing number of graduates, especially in Education, who complete their work at the summer session; (2) to give some recognition to the winners of undergraduate awards, very few of whom ever have opportunity to attend the spring convocation. We cannot fulfil these purposes completely. Summer session graduates are already scattered far and wide, most of them teaching in Alberta schools. We set this convocation for a Saturday, in the hope that some at least of them might be able to get in. With regard to the undergraduate awards, they are too numerous to make it practicable to call all winners to the platform, and we must therefore recognize some of them in a group.



My report on the work of the year we are entering will of course be deferred to the spring convocation, and I shall take this opportunity to make some observations on education in the atomic era.

### *Education in the Atomic Era*

The harnessing of atomic energy, whether for baneful or beneficent purposes, has so radically changed the political, social, and economic prospects of the world as to mark the beginning of a new era. It will take some time fully to adjust our thinking and acting to the new situation. Educators should give leadership in the reorientation of thought, and should take cognizance of changed needs in the development of educational programmes.

Let us look at three of the most obvious problems to be met.

First, we must recognize that the only really effective defence against the atomic bomb is peace. Every generation may fairly be expected to make some unique contribution to civilization. It is clear that our contribution must be the spirit and technique of peace, if indeed our present civilization is not to perish.

The atomic bomb merely crystallized or pointed up a situation that already demanded peace. The industrial age (of which the atomic era is the culminating phase) requires world order to which to function. Not only has its technology, when directed to warlike ends, played havoc on a scale previously undreamed of, but if we are to profit, rather than suffer, by its characteristic local specialization and production for world markets, we must have the conditions which promote world trade. It was in late eighteenth century Great Britain, the largest free trade area in the world of that day, that the industrial revolution began. The United States eventually surpassed Great Britain in industrial development because it had within its own borders a larger, completely free trade area, rich in varied resources. Canada has the area and the resources, but not the population to sustain anything like its present scale of production without access to world markets. In 1867-68, the first year of Canada's nationhood, her combined exports and imports amounted to \$120,000,000 or \$34 for every person in the country. In 1946, the corresponding figures were \$4,240,000,000 for trade and \$354 per capita. Only the United States and the United Kingdom exceed Canada in trading volume. With one-half of one per cent of the world's population, Canada accounts for seven per cent of world trade.

Toynbee points out that when the old isolation of the Greek city-states gave place to interdependence on the economic plane, it thenceforth became impossible that they should remain, without disaster, in their pristine state of isolation on the plane of politics. We know the rest of their history and have no reason to doubt the same fate will befall us if we do not solve the problem of world political relations. Canada has a greater stake than any other country in finding the road to peace.

Our second great problem is the economic cycle. So long as world population was mainly rural, it was possible to meet depressions without such widespread suffering, even starvation. With the rise of industrialism there appeared the ogre of mass unemployment and the demoralizing dole. Urbanization, the concomitant of industrialism, has made depressions more dangerous, more costly, more difficult to rise from. A highly industrialized society for its own protection should see that economic hills and hollows are at least partially levelled. In practice it has done just the opposite.

Formerly when a depression came we tightened our belts and reduced consumption to the point where prices and employment started upward again. Now various factors conspire to increase the amplitude of our economic ups and downs. For example, organized labour naturally uses its power to force wages up with prices, thus helping to produce the familiar inflation spiral. Instead of moderating natural cyclical movements, we have in fact pushed them to the unnatural heights and depths of "boom and bust". Greater social self-control and more public-spirited co-operation are needed here.

One third major problem has to do with labour relations. Certainly labour is entitled to a living wage and proper working conditions. But less than five per cent of the world's population is engaged in factory and industrial labour, and in some countries this fraction has established a dictatorship over the whole. In many countries labour has acted apparently without full consideration of the effects of its actions on the welfare of other groups, the prosperity of which is essential to the welfare of labour itself. For example, we have now in this country a few thousand packing-house workers imperilling the livelihood of three-quarters of a million farm families, the success of whose business is vital to the maintenance of the packing industry. When on top of this they have cut off supplies to their hungry brethren in Britain, and in six provinces are flouting the law, we must recognize a very unhealthy condition, bordering indeed on anarchy. We have no reason to doubt that labour is sound at heart, but we must suspect that in some instances it has been badly led.

Not long ago I heard a member of the United Kingdom Coal Board say that mechanization of British mines had been proceeding steadily for twenty years, and that, contrary to theory and expectation, the output per man had gone steadily downward. He added, "There is no substitute for an honest day's work". We must add, there is no way to maintain prosperity and a high standard of living except by maintaining production. We need a new spirit of co-operation between management and labour, based not only on a recognition of the stark fact that "they must hang together or they will hang separately" but also on the much higher ground of the brotherhood of men in all walks of life.

Unfortunately we are handicapped, in fact almost hamstrung, in our efforts to solve all three of these major problems, by the clash of opposing ideologies. We are forced to adjust ourselves to living in two worlds though the machine age has made us physically one world.

Lenin said: "It is inconceivable that the Soviet Republic should continue to exist for a long period side by side with imperialist states. Ultimately one or the other must conquer." Obviously, if we desire peace we must prove Lenin's prophecy false, and learn to live side by side.

But we can't mix. The Soviet states clearly will not tolerate within their borders any opposition, official or unofficial, to Communism. And the nature of their political doctrine is such that their followers are not interested in becoming just another party in the political system of any of the western democracies. Wherever they gain a foothold they must work unceasingly for the complete destruction of all other parties.

Lenin also said: "We must . . . agree to any sacrifice, and even, if need be, resort to all sorts of stratagems, artifices, illegal methods, evasions and subterfuges,

only so as to get into the trade unions, to remain in them and to carry on Communist work in them at all costs". That explains at least in part the increasing difficulty of labour relations. We can hardly avoid the conclusion that Communists have insinuated themselves into the counsels of labour, not for the purpose of promoting the welfare of the workers, but to gain power and opportunity to stir up trouble and hasten the break-down of our system of government. Wherever dictatorships, whether of the right or the left, have gained control of the government of a country, one of their first steps has been to dissolve labour unions.

In seeking, as we must, a *modus vivendi* between east and west, I believe firmness is the only policy that will gain respect and have a chance of succeeding. Appeasement is thoroughly discredited. We should, on the one hand, try to convince the countries in the Soviet orbit of our desire to respect both their government and their territory, and to enter into friendly trade relations. On the other hand, we should insist that they refrain from interference with our mode of life. Those persons, whether citizens or visitors, whether fascist or communist, who abuse the freedom of these western countries by working here to tear down our constitutions and substitute therefor a dictatorship maintained by police force, should be firmly dealt with.

What should be our guiding light in shaping educational programmes for a people faced with these grievous problems? There is no salvation in materialism. Even the god of Technology has failed to save us. We have worshipped too long at the shrine of technique, including the technique of government. A. N. Whitehead, who knew whereof he spoke, said: "I will disclose one private conviction . . . that, as a training in political imagination, the Harvard School of Politics and Government cannot hold a candle to the old-fashioned English classical education of half a century ago." That gives us a clue. We cannot expect any system based on unproven theory, be its bible *Das Kapital* or *Mein Kampf*, to compare with one based on practical experience and the King James Bible. Our institutions have grown out of three hundred years of struggle for government by consent of the governed, for respect of property and human rights, for equal justice to all. Let us hold fast to that which is good in the past, adding constantly in the continuing light of experience, always protecting the dignity and worth of individual men made in the image and likeness of God.

The primary purpose of education should continue to be the inculcation of the best in English culture, that complex of ideas, customs, and beliefs, that heritage of art, music, literature, and, above all, law and religion, that makes up our glorious tradition. If this first purpose be perfectly fulfilled, the second will follow of its own accord, namely, the development of sound Christian character.

The atomic era, then, does not so much require a change of educational objectives as their intensification. In the summer of 1643, so disastrous for his cause, Cromwell wrote, "There is nothing to be feared but our own sin and sloth." So it is today. We must gird ourselves to battle more valiantly for righteousness. Then shall we see the truth of the Psalmist's words, "Righteousness and peace have kissed each other."

## Report of the President

*As presented to Convocation, May 18 and 19, 1948*

We are completing today the session with the largest registration in our history. In the regular winter session there were registered 4,941 students. In the summer session of 1947 there were 1,297 students at Edmonton, 49 at Calgary, and 610 at Banff. Add 16 diploma students in two courses of four and five months respectively, and we get a grand total of 6,913, as compared with 6,367 in the previous year and 2,327 in 1939-40.

Some 900 degree and diploma students are graduating today and tomorrow, though I regret that for lack of space the diploma students are not here in person. Since, in addition to those who graduate, others always fall by the way for various reasons, and since we expect a freshman class of only about 1,000 next fall, it is clear that we shall experience some recession for a few years. Then we shall start upwards again, because university populations everywhere are growing not only with the size of the state but also with the popularity of higher education.

Owing to lack of space and facilities, it is still necessary to maintain admission quotas in Medicine, Dentistry, and Pharmacy. Fortunately we have been better off in this respect than most Canadian schools. For example, one medical school has had during this session 158 students in second year pre-medicine, of whom only 45 can be carried into first year medicine. By comparison, we hope to carry forward practically all who qualify. Moreover, our situation should improve rapidly from now on. Qualified student veterans are practically all in, and we should gradually overtake the backlog of civilian students.

The increase in student numbers, coupled with rising costs per student, have led in many universities to large operating deficits. In the University of Alberta, thanks to a generous Provincial Government and to the careful stewardship of the Board of Governors, we have been able consistently to balance our budget. Here is the progression of Provincial grants during the past seven years, expressed in thousands of dollars: 450, 500, 551, 602, 746, 829, 972. The second main source of revenue is student fees, which ran as follows, again expressed in thousands of dollars: 254, 237, 239, 221, 414, 688, 726. Substantial grants have also been received in each of the last three years (the post-war years) from the Department of Veterans Affairs. These totalled roughly \$152,000, \$314,000 and \$335,000. These DVA grants will be maintained for three years more, but will diminish rapidly during that period, as student veterans individually exhaust their entitlement to government aid, and collectively become a smaller and smaller proportion of the whole student body.

To complete this part of the financial picture, I should add that service and operating departments, including particularly the residence halls, had collectively an annual turnover increasing from \$371,000 in 1941-42 to \$1,034,000 this year. Adding other small items we get a total budget on current account growing from \$1,089,000 seven years ago to \$3,080,000 this year. The University is getting to be big business!

The other part of the financial picture has to do with capital expenditures for buildings and equipment. From the point of view of a Provincial Government with the highly creditable record of financing all its capital investments from current income, these really form part of the annual grant to the University. They



grew during the seven-year period from \$11,000, when no building was in progress, to \$741,000 this year when we were well started on an extensive programme of construction.

With the prospect of a smaller DVA grant next year, a smaller fee revenue because of decline in number of students, a higher cost per student, not only on account of generally rising costs but also because the bulk of the students will be next year in the more expensive senior classes, we were obliged to ask the Government for a further substantial increase in our grant. It seemed unreasonable, however, to expect the Government to make up the whole of the prospective deficits I have just listed. The Board of Governors therefore decided reluctantly to follow the general trend of all Canadian universities and raise instructional fees.

Effective next September, fees in all faculties and schools will be raised by an average of a little less than 15 per cent. The amount of increase in different schools and faculties has been varied, taking into account the cost of instruction per student and to some extent also the professional attractiveness of these faculties and the public need for their graduates.

That these higher fees, coupled with higher living costs, will be hard on the students cannot be gainsaid, notwithstanding the comparative ease of obtaining moderately well-paid summer employment in recent years. The risk of losing to the service of the state promising students who cannot find the money for a university education must be squarely faced.

The Provincial Government has taken the progressive step of providing again next year \$40,000 for 200 scholarships of \$200 each in the Faculty of Education, as well as undertaking again to pay the fees of students in that Faculty taking the one-year course leading to elementary and intermediate certification. This step recognizes the imperative need for school teachers, and seeks to compensate for the lack of financial attractiveness of the profession by subsidizing the training costs.

There may be different reasons for considering such a subsidy in other faculties. Medicine, for example, is regarded as financially attractive, but costs so much to enter that some students have started calling it a rich man's course. The medical session now extended to nine months per year leaves a very short period in which a student can recoup his finances. Yet we cannot afford to entrust the health of the nation to persons selected on the basis of wealth. One western university has a very good system of medical scholarships provided by the government, really loans which can be discharged by service at country points after graduation. Each year of such service cancels one year's indebtedness incurred during the course of training. In this way the government insures not only that good students short of funds can become doctors, but also that country points needing medical service can be supplied.

Expensive as a large modern university is to maintain, I call your attention to the more than compensating credits on the other side of the ledger: the educated youth, such as you see before you today, eager to take their part in building straight and strong the fabric of the nation; the new knowledge emanating from our research laboratories, ready to applied to practical problems in the wise use of our resources; the numerous contacts with the people at large, elevating and purifying the life of the Province. Our Department of Extension reports a total attendance during the year at lectures, short courses, conferences, educational film showings, etc., aggregating 786,500 persons; a total circulation of travelling libraries, books, plays, study

group materials, etc., amounting to 62,500; a total circulation of our own periodicals and other publications, including *The New Trail*, *Stage Door*, and agricultural bulletins, reaching some 44,000.

I am pleased to report that the University is growing not only in size, but in quality and maturity, and that it is winning even wider recognition. Here is a random series of incidents during the year, which illustrate this point. A novel by Miss Christine van der Mark, of the Department of English, presented to our School of Graduate Studies as a thesis for the M.A. degree, won the Oxford-Crowell prize of \$500 and publication in both Canada and the United States. A Chinese student, attracted by the published papers of Dr. Max Wyman, came here from Wuchang, China, to study advanced mathematics. Mr. E. L. Whitney, an honors student in the Department of Mathematics, ranked among the first five in the international Putman Prize competition. Mr. Russell S. McArthur, a post-graduate student in Education, in Dominion-wide competition won a Carnegie Fellowship valued at over \$2,000 for study in London. Out of fifteen post-graduate students in Agriculture, eight were graduates of other institutions, attracted here by the research work of that faculty. Dr. Douglas Smith, of the Department of Philosophy and Psychology, was appointed a director of the Canadian Psychological Association and a member of the Psychological Research Panel of the Defence Research Board. The Department of Plant Science received from outside the University research grants totalling \$21,000.

To illustrate my earlier remark on the growing stream of new knowledge emanating from the University, I shall mention that we had 207 post-graduate students, nearly all pursuing original investigations under the direction of staff members. The staff itself published during the year 88 scholarly or scientific papers, ranging in subject from the influence of Milton on Keats' poetry to such practical problems as the training of chartered accountants and the nutrition of swine. Other work in progress included such diverse subjects as the psychological problem of living happily through an Arctic winter, the preparation of a botanical manual of the plants of Alberta, the private life of an atomic nucleus, and the reason d'être of our system of taxation.

The Faculty of Agriculture, always noted for its investigational and advisory service to the farmers of the Province, has during the year been supplied with improved facilities for the study of problems in animal nutrition, and with an up-to-date experimental poultry plant.

New instructional courses in preparation for next year include irrigation engineering, engineering geology, coal mining, and petroleum engineering. I mention these to reassure you that the University is mindful of its duty to keep abreast of the times in preparing graduates with the skill and competence to lead in the development of our physical resources.

I should like to say a special word on the progress of our Faculty of Education since the University assumed responsibility for all teacher-training in the Province. There was a record total of 1,051 students in that Faculty this year. Still more significant is the fact that nearly two-thirds of this number were men. Salary improvements doubtless account for part of this remarkable influx of men into the profession of teaching, but the prestige of the university degree must also be accounted a factor. Sixty-four of these students were doing post-graduate work,



investigating a large variety of educational problems. The Calgary Branch was strengthened by the addition of instructors in the Arts and Science subjects of the second years of the B.Ed. courses.

Finally I should like to say a word of thanks to the staff and students of the University who have worked diligently and co-operatively to make the year a success, in spite of all the handicaps inherent in our overcrowded condition. Next year will also be difficult, but after that the progress of our building programme, coupled with some temporary diminution of student numbers, should bring about better working conditions.

\* \* \* \*

Appended are tabular data concerning academic staff numbers; academic staff appointments and promotions; leave of absence, retirements, and resignations; student registration; gifts; new scholarships, prizes and medals; staff publications; and excerpts from reports of the Deans, Directors, Librarian, Provost, Radio Secretary, and Commanding Officers of Armed Service training units.

**Table I.—Academic Staff Numbers**

*Administrative Officers*

President .....	1	
Assistant to the President .....	1	
Deans of Faculties .....	7	
Directors of Schools .....	3	
Director of the Summer Session .....	1	
Provost .....	1	
Adviser to Student Veterans .....	1	
Adviser to Women Students .....	1	
Librarian .....	1	
Superintendent of the University Hospital .....	1	
Registrar .....	1	
Assistant Registrar .....	1	
Alumni Secretary .....	1	
Bursar .....	1	
Wardens of Residence Halls .....	3	
		25

*Full-time Teaching Staff*

Professors .....	40	
Associate Professors .....	37	
Assistant Professors .....	56	
Lecturers .....	29	
Instructors .....	40	
		202
On leave of absence:		
Associate Professors .....	1	
Assistant Professors .....	2	
Lecturers .....	3	
Instructors .....	1	

*Part-time Teaching Staff*

Professors .....	11
Associate Professors .....	3
Clinical Professors .....	10
Assistant Professors .....	6
Assistant Clinical Professors .....	3
Lecturers .....	25

Instructors .....	74	
Demonstrators in the Faculty of Education .....	66	
Student demonstrators and assistants .....	229	
	<hr/>	427
On leave of absence:		
Assistant Professors .....	1	
Instructors .....	1	
<i>Department of Extension</i>		
Director .....	1	
Assistant Professor .....	1	
Librarian .....	1	
Assistant in Study Groups .....	1	
Lecturer .....	1	
	<hr/>	5
<i>Research Council of Alberta</i>		
Chief Research Engineer .....	1	
Associate Research Professor .....	1	
Research Chemist .....	1	
Geologist .....	1	
Chemist .....	1	
Industrial Engineer .....	1	
Soil Surveyor .....	1	
Assistants .....	5	
Co-operating members of the University Faculty .....	7	
	<hr/>	19
<i>Library</i>		
Librarian .....	1	
Reference Librarian .....	1	
Chief Cataloguer .....	1	
Order Librarian .....	1	
Junior Assistants .....	3	
	<hr/>	7
<i>Industrial Laboratories</i>		
Director, Provincial Analyst .....	1	
Assistant .....	1	
	<hr/>	2
<i>Provincial Laboratory of Public Health</i>		
Director, Provincial Bacteriologist .....	1	
Pathologist, Provincial Serologist .....	1	
Assistants .....	2	
	<hr/>	4
<i>Other Academic Staff</i>		
Dietitians .....	3	
Radio Secretary .....	1	
Purchasing Agent .....	1	
Chief Accountant .....	1	
	<hr/>	6
Total .....		697
Less duplicates .....		29
		<hr/>
Total Academic Staff .....		668
		<hr/>

## Table II.—Academic Staff Appointments and Promotions

### *Faculty of Arts and Science*

Ernest Wilson Sheldon, M.A., Ph.D., Professor Emeritus of Mathematics.  
Edward Charles May, A.M., Ph.D., Assistant Professor of Classics.  
Charles Samuel Burchill, M.A., Assistant Professor of History.  
George Moore Self, M.A., Ph.D., Assistant Professor of History and Political Economy (Calgary Branch).  
Edgar Phibbs, M.A., Assistant Professor of Mathematics.  
Edwin T. Sheffield, B.A., Assistant Professor of Mathematics.  
Manoel Faucher, L. en Droit, M.A., Assistant Professor of French.  
Henry Bertram Mayo, M.A., Assistant Professor of Political Economy.  
Henry Kreisel, M.A., Sessional Lecturer in English.  
Richard Stephen Eaton, Mus.B., Lecturer in Music.  
John Benjamin Taylor, A.O.C.A., Lecturer in Art.  
Ernest Raymond Whitehouse, B.A., Lecturer in Drama.  
Eric John Hanson, M.A., from Sessional Instructor to Lecturer in Political Economy.  
Jeanne Elise Olsen, B.Ed., M.A., Sessional Instructor in Botany.  
Robert William Rimmer, B.Sc., Sessional Instructor in Chemistry.  
Jack Ryer, B.Sc., Sessional Instructor in Chemistry.  
Nathan Safran, M.Sc., part-time Sessional Instructor in Chemistry (Calgary Branch).  
John Laurie, B.A., part-time Sessional Instructor in English (Calgary Branch).  
Allin Williams Frost, B.Sc., B.Ed., part-time Sessional Instructor in Mathematics.  
Leonard Carl Pallesen, B.Sc., M.Ed., part-time Sessional Instructor in Mathematics (Calgary Branch).  
Catherine Barclay, B.A., part-time Sessional Instructor in French (Calgary Branch).  
Nicholas John Karateew, part-time Sessional Instructor in Russian.  
Alexander Arthur Snowdon, B.A., B.Ed., Sessional Instructor in Modern Languages.  
Kenneth Howell Hart, M.Sc., Sessional Instructor in Physics.  
Russell Stuart McArthur, M.Ed., part-time Sessional Instructor in Physics.  
Robert Michael Pearce, B.Sc., Sessional Instructor in Physics.  
Arthur Richard James Stephenson, B.A., M.Sc., Sessional Instructor in Physics.  
Hubert Harries, M.Sc., Sessional Instructor in Political Economy.  
Lewis Gwynne Thomas, M.A., Secretary of the Faculty of Arts and Science.

### *School of Household Economics*

Elizabeth Louise Empey, B.Sc., Dietitian, University Dining Room, and Instructor in Household Economics.  
Baunita MacLaren Young, B.Sc., Assistant Dietitian, Education Cafeteria.  
Irene Miller, B.Sc., Sessional Instructor in Household Economics.

### *Faculty of Agriculture*

LeRoy Peter Vernon Johnson, M.Sc., Ph.D., Associate Professor of Genetics and Plant Breeding.

Harold Hugh Draper, B.S.A., M.Sc., Lecturer in Animal Science.  
Robert Hugh Knowles, B.S.A., Lecturer in Horticulture and Grounds Superintendent.  
Joan Stephens, B.Sc., Sessional Instructor in Poultry Husbandry.  
David John Lubert, B.Sc., Sessional Instructor in Dairying.  
John Wooster Kenwood, M.Sc., Sessional Instructor in Soils.

#### *Faculty of Dentistry*

John Warrington Neilson, B.A., D.D.S., M.Sc.D., from Assistant Professor to Associate Professor of Periodontia and Preventive Dentistry.  
Robert Arthur Rooney, D.D.S., from Assistant Professor to Associate Professor of Prosthetic Dentistry.  
Roderick Archibald McEwen, D.D.S., from Lecturer to Assistant Professor of Prosthetic Dentistry.  
William Arthur E. Quigley, L.D.S., D.D.S., Assistant Professor of Orthodontia.  
George Edward Decker, D.D.S., Sessional Instructor in Oral Diagnosis.  
William Alvin McIver, D.D.S., Sessional Instructor in Operative Dentistry.

#### *Faculty of Education*

Andrew Leo Doucette, M.A., Director of the Calgary Branch.  
Harold Stewart Baker, M.A., Assistant Professor of Education.  
Bernal Ernest Walker, M.A., Assistant Professor of Education.  
Wesley Fletcher Irwin, B.A., part-time Instructor in Art (Calgary Branch).

#### *Faculty of Engineering*

James Alfred Harle, M.Sc., M.I.E.E., Professor of Electrical Engineering.  
George Wheeler Govier, B.A.Sc., M.Sc., from Assistant Professor to Associate Professor of Chemical Engineering.  
Frank James Hastie, B.Sc., Associate Professor of Electrical and Mechanical Engineering.  
Thomas Patching, B.Sc., Assistant Professor of Mining and Metallurgy.  
Jack Longworth, M.Sc., Sessional Lecturer in Civil Engineering.  
Stewart Ronald Sinclair, M.Sc., Sessional Lecturer in Civil Engineering.  
Andrew Baracos, B.Sc., part-time Sessional Instructor in Civil Engineering.  
Patrick Bouthillier, B.Sc., part-time Sessional Instructor in Sanitary Engineering.  
Ray Alexander Brown, B.Sc., part-time Sessional Instructor in Civil Engineering.  
Murdo Murchison, B.Sc., Sessional Instructor in Civil Engineering.  
Chesley James McConnell, B.Sc., Sessional Instructor in Civil Engineering.  
Benjamin Bernard Torchinsky, B.Sc., Sessional Instructor in Civil Engineering.  
Stephen Russell Hayden, B.Sc., Sessional Instructor in Electrical Engineering.  
Robert William King, B.Sc., Sessional Instructor in Electrical Engineering.  
Joseph Francis Perrier, B.Sc., Sessional Instructor in Electrical Engineering.  
Gerald W. Sadler, B.Sc., Sessional Instructor in Electrical Engineering.

#### *Faculty of Law*

George Hobson Steer, K.C., M.A., Honorary Professor of Law.  
Wilbur Fee Bowker, B.A., LL.B., from Associate Professor to Professor of Law, and Acting Dean of the Faculty.

Alexander Smith, B.A., LL.B., Associate Professor of Law.  
Leonard Cornelius Hawco, B.A., Sessional Lecturer in Law.  
Douglas Walker Cobbledick, LL.B., Instructor in Dental Jurisprudence.  
Ernest Brown Wilson, B.A., LL.B., Sessional Instructor in Commercial Law.

### *Faculty of Medicine*

Percy Harry Sprague, M.D., M.Sc., F.A.C.P., from Clinical Professor to Associate Professor of Medicine.  
Ernest Hay Watts, B.A., M.D., from Lecturer to Clinical Professor of Anaesthesia.  
Allan Day, M.B., from Assistant Professor to Clinical Professor of Obstetrics and Gynecology.  
Emil Otto Hohn, M.B., B.S., M.Sc., F.Z.S., Assistant Professor of Physiology.  
Albert Ernest Archer, C.B.E., M.B., F.R.S.C.(C), LL.D., Lecturer in Medical Economics and Ethics  
Walter Campbell MacKenzie, B.Sc., M.D., C.M., M.S., F.R.S.C.(C), F.A.C.S., from Instructor to Lecturer in Clinical Surgery.  
Donald Robert Wilson, B.A., M.D., C.M., F.R.C.P.(C), Lecturer in Medicine.  
Harold Lane Richard, M.D., F.R.S.C.(C), Instructor in Anatomy.  
Gordon Edward Myers, M.Sc., Instructor in Bacteriology.  
Alexander Donald McPherson, M.D., Instructor in Mental Hygiene and in Psychiatry.  
Hector Ewart Duggan, M.D., Instructor in Radiology.  
Stanley Greenhill, M.D., D.P.H., Instructor in Clinical Medicine.  
James McKenzie Sinclair, B.A., M.D., Instructor in Clinical Medicine.  
Robert Harvey Whiting, M.D., C.M., Instructor in Clinical Medicine.  
Stephen Sackville Parlee, B.Sc., M.D., M.R.C.O.G., Instructor in Obstetrics and Gynecology.  
Samuel Hanson, M.I.D., M.D., Instructor in Pathology.  
Guy Kent Morton, M.D., Instructor in Neurosurgery.  
Gordon Lohead Wilson, M.D., Instructor in Orthopedic Surgery.

### *Department of Extension*

John Brian Melville Piercy, B.Sc., Lecturer in Extension.

### *Department of Physical Education*

Patricia Austin, P.B.H.E., Lecturer in Physical Education.  
W. Donald Smith, B.P.H.E., M.A., Lecturer in Physical Education.

### *Other Appointments*

Walter Hugh Johns, B.A., Ph.D., Executive Assistant to the President.  
John Maclean Whidden, B.Com., Bursar.  
Edward Frederick Hunter, B.Com., Purchasing Agent.  
John William Evans Markle, B.A., A.T.C.M., Alumni Secretary.  
Harry Theodore Sparby, B.Sc., M.A., Provost.  
Dennis McNeice Healy, M.B.E., B.A., Dip.d'Et.Sup., L-es-L, Docteur d'Université, Warden of Athabasca Hall.  
George Murray Dunlop, M.A., Director of the Summer Session.

Henry George Glyde, A.R.C.A., Curator of Art Exhibits.

James McKenzie Sinclair, B.A., M.D., Assistant Infirmary Physician.

### Table III.—Leave of Absence

Ernest Sydney Keeping, B.Sc., D.I.C., Associate Professor of Mathematics (Sabbatical).

Edward Joseph Hollingsworth Greene, M.A., Assistant Professor of French (Sabbatical).

Henry Weldon Hewetson, M.A., Assistant Professor of Political Economy (Sabbatical).

Whitmore Pipes Calhoun, B.A., D.D.S., Assistant Professor of Operative Dentistry.

Elio D'Appolonia, B.Sc., Lecturer in Civil Engineering.

Geoerge Ford, M.Sc., Lecturer in Civil Engineering.

Helen Barbara Stadelbauer, Lecturer in Art.

Shiela Jean Murray, B.Sc., Instructor in Household Economics.

Gordon Irving Bell, M.D., Instructor in Clinical Medicine.

### Table IV.—Retirements

John Percy Sackville, B.S.A., M.S., Professor of Animal Husbandry.

Edouard Sonet, M.A., Docteur d'Université, Professor of Modern Languages.

Archibald West, Bursar.

### Table V.—Resignations

Alan William Bell, B.Com., M.B.A., C.A., Chief Accountant.

Wray Muriel Bowden, B.A., Ph.D., Lecturer in Botany.

John Clemence Gordon Brown, B.A., Alumni Secretary.

James Kenneth Ferguson, B.Com., C.A., Accountant.

Thomas Hawker, D.D.S., Instructor in Operative Dentistry.

Paulden Ford Knowles, M.Sc., Ph.D., Associate Professor of Field Crops.

Frank W. Peers, B.A., B.Ed., Assistant to the Director, Department of Extension.

James Augustus Romeyn, B.A., M.D., Associate Professor of Bacteriology.

Clarence Rupert Tracy, B.A., Ph.D., Assistant Professor of English.

Astor Ralph Schrag, M.D., Instructor in Psychiatry.



Table VI.—Registration

	Civilian			Rehabilitation			Totals											
	Men		Total	Men		Total	Men		Total									
	46-47	47-48		46-47	47-48		46-47	47-48										
<b>TOTAL REGISTRATION</b> (Full and summer session and short courses*)	1434	1764	1808	1731	3242	3495	46-47	47-48	46-47	47-48	46-47	47-48	46-47	47-48	46-47	47-48	46-47	47-48
Add cancellations	36	28	22	17	58	45	2450	2644	115	108	2565	2752	3884	4408	1923	1839	5807	6247
							50	30	12	1	62	31	86	58	34	18	120	76
	1470	1792	1830	1748	3300	3540	2500	2674	127	109	2627	2783	3970	4466	1957	1857	5927	6323
	27	48	49	46	76	94	83	139	5	6	88	145	110	187	54	52	164	239
<b>Less Duplicates</b>	1443	1744	1781	1702	3224	3446	2417	2535	122	103	2539	2638	3860	4279	1903	1805	5763	6084
<b>I. FULL SESSION</b>																		
<b>I. Arts and Science:</b>																		
B.A.	45	59	100	143	155	202	84	107	16	17	100	124	129	166	126	160	255	326
B.Sc.	158	259	83	86	241	345	251	250	11	9	262	259	409	509	94	95	503	604
B.A., B.Com.	3	5	3	3	3	5	4	3	...	...	4	3	4	8	3	3	7	8
B.A., B.Ed.	1	1	6	3	9	3	...	...	...	...	...	...	1	...	6	3	9	3
B.A., B.Sc. (Agr.)	2	2	...	1	1	2	...	...	...	...	...	...	2	2	...	...	1	2
B.A., B.Sc. (Eng.)	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B.A., B.Sc. (B.A.)	2	1	3	1	5	2	...	1	...	...	...	1	2	2	3	1	5	5
B.Sc., B.Ed.	30	41	...	1	30	42	77	43	2	2	79	45	107	84	2	3	109	87
B.A., L.L.B.	4	13	...	...	4	13	11	13	...	...	11	13	15	26	...	...	15	26
B.Sc., D.D.S.	20	35	8	4	28	39	123	71	4	2	127	73	143	106	12	6	155	112
B.Sc., M.D.	...	11	...	...	...	11	40	13	...	...	40	13	40	24	...	...	40	24
Pre-Dental	263	427	213	238	476	665	590	501	33	30	623	531	853	928	246	268	1099	1196
2. Agriculture	91	117	4	7	95	124	208	215	...	...	208	215	299	332	4	7	339	339
3. Commerce	38	58	16	14	54	72	228	242	4	5	232	247	266	300	20	19	286	319
4. Dentistry	37	27	...	1	37	28	71	86	...	...	71	86	108	113	...	1	108	114
5. Education:																		
Edmonton:																		
B.Ed.—4 yr.	52	67	132	75	184	142	322	28	36	3	358	31	374	95	168	78	542	173
B.Ed.—3 yr.	11	11	17	17	28	28	...	254	...	22	2	276	...	265	...	39	304	10
B.Ed. in Agr.	6	3	...	4	6	3	2	7	...	...	...	...	8	10	...	...	8	4
B.Ed. in H.Ec.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
B.Ed. in Ind. Arts	...	1	...	...	...	...	...	5	...	...	...	5	...	6	...	...	6	2
B.Ed. after B.A.	2	81	2	1	4	1	...	...	...	...	...	...	2	1	2	1	4	2
Jr. E. and I.	54	81	108	146	162	227	3	2	...	...	3	2	57	83	108	146	165	229
Sr. E. and I.	...	4	...	5	...	9	...	...	...	...	...	...	...	4	...	5	9	13
Sr. H.S. Cert.	...	7	...	6	...	13	...	...	...	...	...	...	...	7	...	6	...	...
	114	174	242	254	356	428	327	297	36	25	363	322	441	471	278	279	719	750

Calgary:	3	3	4	6	7	9	2	5	5	8	4	6	9	14
B.Ed.—4 yr.	...	...	...	1	...	1	...	2	...	2	...	1	...	3
B.Ed.—3 yr.	...	2	...	1	...	2	...	...	...	2	...	...	...	2
B.Ed.—Agr.	20	4	...	...	20	...	...	...	...	...	...	...	38	43
B.Ed.—Ind. Arts	41	25	44	84	85	109	18	39	38	43	44	86	85	114
Jr. E. and I.	...	2	...	2	...	4	...	1	41	28	...	...	...	5
Sr. E. and I.	9	...	9	...	18	...	...	...	9	...	9	...	18	...
War Emergency	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	73	36	57	93	130	129	20	50	93	86	57	95	150	181
Total in Education	187	210	299	347	486	557	347	347	534	557	335	374	869	931
6. Applied Science:														
First Year	100	95	1	...	101	95	282	140	382	235	1	...	383	235
Chemical	38	46	1	1	39	47	71	111	109	157	1	1	...	110
Civil	56	61	...	...	56	62	86	148	142	209	...	1	142	210
Electrical	45	52	2	...	47	52	94	167	139	219	2	...	141	219
Mining	20	21	...	...	20	21	70	102	90	123	...	...	90	123
Eng. Physics	4	4	...	1	4	5	4	12	8	16	...	1	8	17
Total	263	279	4	3	267	282	607	680	870	959	4	3	874	962
7. Household Economics:														
B.Sc., H.Ec.	...	...	92	88	92	88	...	...	...	...	105	101	105	101
B.H.Ec.	...	...	9	3	9	3	...	...	...	...	10	4	10	4
	...	...	101	91	101	91	...	...	...	...	115	105	115	105
8. Law	8	20	1	...	9	20	42	59	50	79	1	...	51	79
9. Medicine	101	102	14	15	115	117	39	84	140	186	15	17	155	203
10. Nursing:														
B.Sc.	...	...	102	101	102	101	...	...	...	...	110	104	110	104
Diploma	...	...	87	112	87	112	...	...	...	...	89	113	89	113
Diploma Pub. Health	...	...	13	2	13	2	...	...	...	...	19	4	19	4
Diploma T. & Superv.	...	...	4	2	4	2	...	...	...	...	4	2	4	2
	...	...	206	217	206	217	...	...	...	...	222	223	222	223
11. Pharmacy:														
B.Sc.	16	21	16	21	32	42	50	65	66	86	20	24	86	110
Diploma	4	...	...	1	4	1	7	9	11	9	3	1	14	10
	20	21	16	22	36	43	57	74	77	95	23	25	100	120

Table VI.—Registration—Continued

	Civilian			Rehabilitation			Totals		
	Men		Total	Men		Total	Men		Total
	46-47	47-48	46-47 47-48	46-47	47-48	46-47 47-48	46-47	47-48	46-47 47-48
<b>12. Graduates:</b>									
M.A. (Arts)	17	18	23	11	18	29	28	36	64
M.Sc. (Agr.)	23	24	28	8	12	20	31	36	67
M.Sc. (Eng.)	13	9	13	8	7	15	21	16	37
M.Ed.	14	19	13	4	5	9	17	24	41
Special	10	12	18	9	33	42	23	57	80
B.D.	3	4	26	1	7	8	14	19	33
			3			1	4	4	8
	93	110	124	45	82	127	138	192	330
<b>13. Auditors</b>									
<b>14. Partials</b>	9	2	17	2	2	4	9	4	13
	20	29	50	12	17	29	32	46	78
Less Cancelled	1130	1402	2073	2246	2389	4635	3376	3791	7167
	36	28	58	50	30	80	86	58	144
	1094	1374	2015	2196	2359	4555	3290	3733	7023
<b>II. SUMMER SESSION</b>									
Edmonton	321	355	1199	188	254	443	509	609	1118
Calgary	18	21	20	53	27	80	71	48	119
Banff**	1	4	8	...	1	...	1	5	6
	340	380	1227	241	282	523	581	662	1243
<b>III. SHORT COURSES</b>									
Diploma Dairying	...	10	...	13	3	16	13	13	26
Adv. Obstetrics	...	...	3	...	...	...	...	...	...
	...	10	...	13	3	16	13	13	26
<b>Grand Total</b>	1434	1764	3242	2450	2644	5094	3884	4408	8292

\*Except the non-degree-credit students at the Banff School of Fine Arts, who numbered 590.

\*\*Only students taking courses for degree credit reported here.

**Table VII.—Distribution of Students According to Home Address  
and Birthplace, Session 1947-48**

**A. British Commonwealth and Empire:**

	Home Address	Birthplace
(a) Canada:		
Edmonton .....	1925	861
Calgary .....	672	581
Lethbridge .....	107	116
Medicine Hat .....	53	70
Red Deer .....	56	47
Vegreville .....	24	49
Wetaskiwin .....	25	28
Camrose .....	19	31
Cardston .....	32	50
Others .....	1706	1776
Alberta .....	4619	3609
Nova Scotia .....	1	20
Prince Edward Island .....	1	6
New Brunswick .....	.....	7
Quebec .....	1	12
Ontario .....	16	108
Manitoba .....	18	160
Saskatchewan .....	143	468
British Columbia .....	111	146
	4910	4536
(b) Other parts of the British Commonwealth and Empire:		
British Isles .....	4	132
Dominions .....	1	6
Crown Colonies .....	3	5
	8	143
	4918	4679

**B. Other Countries:**

Balkan States .....	.....	14
France .....	.....	2
Germany .....	.....	11
Poland .....	.....	61
Russia and the Ukraine .....	.....	23
Scandinavian States .....	.....	17
United States of America .....	7	94
Others .....	2	32
	9	254

**C. Information not Specified .....**

14	8
4941	4941

**Table VIII.—Distribution of Students According to Sex and  
Marital Status, Session 1947-48**

Rehabilitation Students					Civilian Students				
Male		Female		Total	Male		Female		Total
Single	Married	Single	Married		Single	Married	Single	Married	
1339	1051	87	7	2484	1273	129	1027	28	2457

**Table IX.—Distribution of Full-time Students According to Faculty or School and Year of Course, Session 1947-48**

Faculty or School	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	Total
Arts and Science .....	409	435	316	36	....	....	....	1196
Agriculture .....	90	131	94	24	....	....	....	339
Commerce .....	113	110	95	1	....	....	....	319
Dentistry .....	....	26	50	23	15	....	....	114
Education .....	538	202	154	37	....	....	....	931
Engineering .....	235	355	260	112	....	....	....	962
Household Ec. ....	39	32	34	....	....	....	....	105
Law .....	....	....	45	16	18	....	....	79
Medicine .....	....	....	50	45	35	41	32	203
Nursing .....	77	60	50	21	18	....	....	226
Pharmacy .....	52	45	23	....	....	....	....	120
Graduate Studies .....	100	64	....	3	1	....	....	168
B.D. Degree .....	2	1	1	....	....	....	....	4
Specials .....	8	13	21	21	1	....	....	64
Not Specified .....	....	....	....	....	....	....	....	111
	1663*	1474	1193	339	88	41	32	4941

\*Total number of Freshmen is 1553 (i.e. 1663 less Graduate Studies, B.D., and Specials).

**Table X.—Gifts**

From the National Research Council, \$30,707.70 in accountable advances for research work under the direction of the following staff members: Dr. R. K. Brown, \$800; Dr. M. M. Cantor, \$1,710; Dr. R. G. H. Cormack, \$150; Dr. W. G. Corns, \$950; Dr. S. G. Davis, \$375; Dr. W. F. Gillespie, \$500; Dr. E. H. Gowan, \$500; Dean R. M. Hardy, \$2,057.31; Dr. A. W. Henry, \$1,700; Dr. G. Hunter, \$2,550; Dr. P. F. Knowles, \$625; Dr. G. O. Langstroth, \$750; Dr. A. G. McCalla, \$6,596; Dr. L. W. McElroy, \$2,150; Dr. H. R. MacLean, \$500; Dr. J. L. Morrison, \$1,121.10; Dr. H. Orr, \$3,203.98; Dr. W. Rowan, \$400; Dr. D. B. Scott, \$835.81; Dr. R. F. Shaner, \$300; Dr. W. C. Stewart, \$250; Dr. H. R. Thornton, \$1,160; Dr. J. Tuba, \$948.50; Dr. O. J. Walker, \$575.

From the National Cancer Institute of Canada, three grants in aid of cancer research: Dr. R. K. Brown, \$2,500; Dr. H. E. Rawlinson, \$400; Dr. R. B. Sandin, \$1,350.

From the Defence Research Board, two research grants; Dr. G. O. Langstroth, \$1,500; Dr. D. E. Smith, \$1,500.

From the Central Mortgage and Housing Corporation, \$5,000 for research carried on by Dean R. M. Hardy, on behalf of the Prairie Rural Housing Committee.

From the City of Edmonton, grants totalling \$2,000 for investigations on concrete pavement in the Department of Civil Engineering.

From the Canadian Construction Association, \$1,000 for research on highway projects in the Department of Civil Engineering.

From the Alberta Transit Mix Concrete Company, Calgary, \$250 for an investigation of the durability of Alberta aggregates in the Department of Civil Engineering.

From the Barley Improvement Institute, \$3,500 in aid of the barley breeding programme in the Department of Plant Science.

From the Maple Leaf Milling Co., Limited, \$1,200 in aid of research on soft wheats in southern Alberta in the Department of Plant Science.

From Purity Flour Mills Limited, \$1,200 for research on white spring wheats in southern Alberta in the Department of Plant Science.



From Robin Hood Flour Mills Limited, \$1,200 for research on white spring wheats in southern Alberta in the Department of Plant Science.

From Ellison Milling Company, \$500 in support of research on white spring wheats in the Department of Plant Science.

From Line Elevators Farm Service, \$500 in aid of a breeding project with hard winter wheat in the Department of Plant Science.

From North American Cyanamid Limited, \$500 for use by Dr. J. R. Fryer in experiments on the chemical defoliation of legume seed crops.

From Naugatuck Chemical Company, \$500 for experimental work by Dr. W. G. Corns on the chemical control of weeds.

From the Consolidated Mining and Smelting Company, \$500 to assist Dr. J. E. Bowstead's investigations on the use of urea.

From Merck & Co., Ltd., 500 miligrams of biotin, worth about \$3,000, for use in poultry research in the Department of Animal Science.

From the United Grain Growers Limited, \$300 to assist investigations on turkey rations in the Department of Animal Science.

From Mr. Claude Gallinger, Edmonton, two Belgian geldings and a Shorthorn steer, for the Department of Animal Science.

From the Canadian Foundation for the Advancement of Pharmacy, a total of \$1,375 for a teaching fellowship and for research work in the School of Pharmacy.

From a Calgary firm, \$1,000 for the building programme of the Banff School of Fine Arts.

From Mr. Hugh Banderob, Banff, \$50; from Mr. W. E. Hopper, Midland, Penn., \$25; from Miss Inger Kroman, San Leandro, California, \$15; to the Banff Foundation, to be used for the Banff School of Fine Arts.

From an anonymous donor, \$20 in aid of Dr. R. B. Sandin's cancer research.

From Mrs. Elizabeth T. Weir and the Law Society of Alberta jointly, \$10,000 to the University of Alberta Foundation to establish "The John Alexander Weir Memorial Fund" for the purchase of books for the Law Library.

From the Law Society of Alberta, \$500 for the purchase of books for the Law Library.

From the College of Physicians and Surgeons of Alberta, \$200 for the purchase of books for the Medical Library.

From the Senior Class of 1948, \$110 for the purchase of Library books of a general educational nature.

From Mr. Byron H. Wilson, St. Albert, thirty-three bound volumes of the "Minnesota Horticulturist".

From Mr. G. W. Auxier, Edmonton, a complete set of "The Territories Law Reports" (7 volumes), "The Western Law Reporter" (34 volumes), and 28 volumes of "The Western Weekly Reports".

From the University of Western Ontario, the Canadian Medical Association, the late Professor G. M. Smith, and numerous other sources, gifts of books to the Library.

From Mrs. E. K. Broadus, Boston, Mass., a set of Boston Symphony Orchestra programmes.

From the Canadian Universities Returned Men's Association, University of Alberta, \$164.96 to bring the Loan Fund to a total of \$1,000.

From Dr. J. T. Ross, Edmonton, an LL.D. gown.



From Northland Automatic Appliances Limited, Calgary, a Bendix automatic washing-machine for use in the School of Household Economics.

To the Department of Geology Museum and teaching collections: over 130 specimens of corals and modern shells from Miss Laura Woolverton, London, Ont.; a plaster plaque and specimens of rock from Italy and Gibraltar from G. C. Hamilton; a section of a mastodon tusk from L. H. Phinney; museum specimens, including labradorite from Labrador, from T. C. Mewburn; a suite of 16 hand specimens of ores and minerals from Franklin Furnace, N.J., from Dr. A. G. Scott; other specimens of ores, rock, and minerals from Dr. Y. O. Fortier, Geological Survey, Ottawa, L. H. Cole, Bureau of Mines, Ottawa, C. E. B. Conybeare, S. J. Kidd, J. L. Carr, B. H. Bludgeon, International Uranium Co. Ltd., D. B. Bullock, D. Pickett, Dr. D. F. Kidd, Dr. R. E. Folinsbee, Western Printing and Lithographic Co., J. Gledlie, W. R. S. Henderson, A. H. Gibson, H. M. Whittles, R. J. Rousseau, R. P. Douglas, H. O. Ritchie, W. H. Hargreaves, W. J. Dean, C. R. Wray; fossil specimens from H. Noblitt, J. R. Ower, G. Robinson, Miss N. Robb, L. M. Clark, C. E. Anderson, A. Kowalchuk, R. W. Edie, J. Hargreaves, E. M. Robers, A. H. Manifold, R. Harps.

From the "Friends of the University": 104 individual donors, \$1,020; from Mr. R. J. Dinning, President of Burns and Company, \$500 for research in the Department of Animal Science; from John Dower, \$100; from T. Eaton Company, \$100; from the Edmonton Journal, \$100; from an anonymous donor, \$50 for cancer research. Unless otherwise specified, these gifts are used to provide bursaries and for the purchase of special research equipment and books, for example, a grant was made to the Library for the purchase of "Beilstein's Handbuch der Organischen Chemie", the Malone Society Reprints, 87 volumes.

### **Table XI.—New Scholarships, Prizes and Medals**

#### *Available to University of Alberta Students*

From the family of the late Mr. Sam J. Gorman, oil royalties, not to exceed a total of \$7,000, to establish "The Sam J. Gorman Scholarship" of \$200 per annum, to be awarded to an undergraduate student in the petroleum engineering course.

From Mr. and Mrs. Alfred Chard, a \$5,000 Dominion of Canada bond to endow "The Joseph Dolson Oliver Mothersill Memorial Scholarship", to be awarded to a student selected for outstanding contribution to student life in the University, especially through good citizenship and active support of student government.

From Canadian Industries Limited, a fellowship of \$750 per year for graduate work in Chemical Engineering or Chemistry.

From the Western Canada Dental Society, \$500 to be added to the M. H. Garvin Scholarship Fund and \$200 to be added to the Post-graduate Scholarship Fund in the Faculty of Dentistry.

From the Alberta Tuberculosis Association, a fellowship of \$500 to be awarded to a graduating student in the Faculty of Medicine to facilitate his training in the tuberculosis field; also two prizes of \$75 and \$25 respectively for essays on tuberculosis, to be awarded to fourth-year medical students.

From G. H. Wood & Company Limited, a scholarship of \$500 to be awarded to a student in the Faculty of Medicine.

From the Edmonton Furniture Dealers Association, an annual scholarship of \$250 for a period of five years, in honour of Mr. W. T. Henry, to be awarded to a student in the School of Commerce.

From the Western Daily Newspapers Advertising Managers' Association, an annual scholarship of \$100 for a period of five years, to be awarded to the student entering his final year in the School of Commerce with the best average standing in courses giving a suitable preparation for specialization in advertising.

From the Lethbridge Municipal Chapter, I.O.D.E., a War Memorial Bursary of the value of \$500, payable over a period of three years to a Lethbridge student selected by an I.O.D.E. committee.

In accordance with the terms of a bequest to the University from the late Mr. A. Cristall, an annual scholarship of \$100 for three years, to be awarded preferably to a student in a course in architecture.

From the Government of France, \$250 for scholarships in oral French at the Banff School of Fine Arts.

From the Volunteer Overseas Medical Officers' Association, a \$200 increase in the endowment of "The Moshier Memorial Medal", in order to maintain it in perpetuity.

From the Canadian Dental Association, two annual prizes of \$125 and \$75, for award to fourth-year undergraduate students in attendance at dental faculties of Canadian universities who submit essays in the War Memorial Scholarship Essay Contest.

From Mrs. J. E. Olsen, an annual prize of \$35 in the Department of Botany, to be known as "The J. E. Olsen Prize".

From Mrs. E. L. Fuller, a prize of \$25 in English 57, to be known as "The Ernest Lorne Fuller Memorial Prize".

From Dr. E. T. Allan, \$50, and from Dr. S. C. Hodgson, \$25, as annual contributions to the Post-graduate Scholarship Fund in Dentistry.

From the International Accountants' and Executives' Corporation of Canada, a \$25 prize for award to a student in the School of Commerce.

From Mrs. R. E. Staples, \$15 for "The Ray E. Staples Memorial Prize" in the School of Nursing, to be awarded to the graduand who has the best record for kindness and proficiency in bedside nursing.

From Professor M. H. Long, "The George Malcolm Smith Memorial Prize", an annual book prize for the student with the highest standing in History 65.

From Merck & Co. Ltd., the book prize in the School of Pharmacy increased from one to two awards annually.

From the Government of Belgium, five books for award to an Honours student in French.

From the Swiss Legation, Ottawa, a set of four books, to be known as "The Minister of Switzerland's Prize in French".

*Available to Western Board of Music students*

From Mr. E. U. Rylands, Lethbridge, an annual scholarship of \$100 for a period of three years.

From Mr. W. A. MacDonald, Publisher of the Edmonton Journal, an increase from \$100 to \$200 in the annual scholarship offered

From the Alberta Women's Institute, Viking, \$50.

From Mr. J. Drever, Rycroft, \$25.

From Mr. J. Lawrence, Red Deer, \$25.  
From Mrs. E. Newton, Grande Prairie, \$25.  
From the Thomas Greentree Chapter, I.O.D.E., Drumheller, two awards of \$15 each.

## Table XII.—Staff Publications

### *Department of Accounting*

- Winspear, F. G. Theory and practice in the training of accountants. Can. Chartered Acct. 51:350-360. 1947.  
Campbell, J. D. Fiscal policy of corporation management, 1946. Can. Chartered Acct. 51:124-137. 1947.

### *Department of Anatomy*

- Rawlinson, H. E. Iron deposition in the mammary gland of dba mice. Proc. 4th Int. Cancer Res. Congr., St. Louis. September, 1947.  
Shaner, R. F. Transposition of the great vessels and ventricles of the human heart. Trans. Roy. Soc. Can., III, 41:30. 1947.

### *Department of Animal Science*

- Robblee, A. R., and Clandinin, D. R. Stability of riboflavin in premixes. Poultry Sci. 27:234-244. 1947.  
Bowstead, J. E., and Fredeen, H. Feeding urea to dairy cows with special reference to the palatability of feed mixtures containing urea. Sci. Agr. 28:66-78. 1948.  
Sinclair, R. D. Swine nutrition. Can. J. Comp. Med. 2(12):360-368. 1947.  
Sackville, J. P. Dual purpose cattle. U. of A. Bull. No. 47. July 1947.  
McElroy, L. W., Kastelic, J., and McCalla, A. G. Thiamin and riboflavin content of wheat, barley and oats grown in different zones in Alberta. Can. J. Res. F, 26:191-200. 1948.  
McElroy, L. W., and Simonson, H. The niacin content of wheat, barley and oats grown in different soil zones in Alberta. Can. J. Res. F, 26:201-207. 1948.

### *Department of Bacteriology and Hygiene*

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- Kolthoff, I. M., and Harris, W. E. Mercaptans as promoters and modifiers in emulsion copolymerization of butadiene and styrene using potassium persulfate as catalyst. I. Mercaptans as promoters. *J. Polymer Res.* 2:41-48. 1947. II. Mercaptans as modifiers. *Ibid.* 2:49-71. 1947. III. Calculation of molecular weights and intrinsic viscosities of polymers from mercaptan consumption data. *Ibid.* 2:72-81. 1947. IV. Definition and calculation of modifier efficiency. *Ibid.* 2:82-89. 1947.
- Lemieux, R. U., and Morrison, J. L. The adsorption of aliphatic acids on activated charcoals. *Can. J. Res. B*, 25:440-448. 1947.
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### *Department of Civil and Municipal Engineering*

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### *Department of Classics*

- Johns, W. H. Dramatic effect in the *Antigone* 1232. *Classical J.* 43(2):99-101. 1947.

### *Department of Dairying*

- Thornton, H. R. The reduction tests. *Dairymen's Digest.* 2(1):5. 1947.

### *Department of Dentistry*

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#### *Department of History*

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#### *Department of Household Economics*

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#### *Department of Mathematics*

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*Department of Philosophy and Psychology*

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*Department of Political Economy*

Stewart, A. Variability in crop yields as affecting values of land. *Proc. Joint Conf. Am. Soc. Farm Managers and Rural Appraisers and Appraisal Inst.* Can. 31-38. 1947.



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#### *Department of Soils*

- Bowser, W. E., Erdman, R. L., Wyatt, F. A., and Newton, J. D. Soil survey of Peace Hills sheet. Rep. 14. Alta. Soil Survey. 1947.
- Bentley, C. F., and Rost, C. O. A study of some solonchic soil complexes in Saskatchewan. *Sci. Agr.* 27:293-313. 1947.
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#### *Department of Zoology*

- Miller, R. B. The effects of different intensities of fishing on the whitefish populations of two Alberta lakes. *J. Wildlife Mgmt.* 11:289-301. 1947.
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- Miller, R. B., and Kennedy, W. A. Observations on the lake trout of Great Bear Lake. *J. Fish. Res. Bd. Can.* 7(4): 176-189. 1948.
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#### *Faculty of Law*

- Bowker, W. F. The law of evidence in Canada, 1923-1947. *Can. Bar Rev.* 26:246-267. 1948.

### **Report of Dean John Macdonald of the Faculty of Arts and Science**

#### *Calgary Branch—Faculty of Education*

For the first time, courses in Arts and Science have been provided in the Calgary Branch of the Faculty of Education. In 1947-48 instruction was provided in Mathematics, Chemistry, English, French, Political Economy, and History. Instruction in Political Economy and History was given by Dr. G. M. Self, who was added to the staff of the Department of History for this purpose. A temporary arrangement was made with the Calgary School Board for the loan of teachers to instruct in the other subjects mentioned. It is expected that this temporary arrangement will come to an end by the appointment of full time instructors in the subjects

concerned by next September. The total registration in the Arts and Science classes was 64.

### *Progress During Session*

Two points may be mentioned in this connection: (a) Dr. Healy and Dr. D. B. Scott are acting on the committee appointed by the President, under the chairmanship of Professor Stewart, to investigate the provision for education in the Humanities throughout the University. I have instructed Dr. Healy and Dr. Scott to give attention from this point of view to our present curriculum for the B.A. and B.Sc. degrees, ordinary and Honors. Their recommendations will be reported in due course. (b) The plan of advance registration has been continued this session. This plan has proved useful not only in the way of facilitating the preparation of the time-table, for which it was instituted, but also for checking irregularities of registration which, in view of the large numbers involved, are difficult to check in the fall in sufficient time to adjust the courses of the students concerned.

### *Departmental Reports*

I wish to append reports concerning research in some individual departments as follows:

*Botany, Report of Dr. E. H. Moss*—The staff of the Department has been able to do a considerable amount of research. Dr. Cormack has conducted research on root hairs and related problems. Dr. Whyte has initiated work on physiology of rooting in woody cuttings. Dr. Moss spent a few weeks last summer investigating grass land and the vegetation in the Peace River region. A successful botanical foray was held at Lesser Slave Lake in August. One of the major projects of the Department is the production of a manual for the flora of Alberta. Considerable work was done during the year on this project.

*Chemistry, Report of Dr. O. J. Walker*—Research has been carried out actively in the Department despite the confusion of working in a building under construction. All the members of the Department have research programmes under way, and in some of these have been assisted by twelve graduate students working towards their Master's degrees. The problems being undertaken are greatly varied and cover fields in Organic, Inorganic, Analytical and Physical Chemistry. Funds with which to carry out research have been supplemented by grants from the National Research Council, the Research Council of Alberta, the Canadian Cancer Commission, the Defence Research Board, and other agencies. The titles of the fourteen papers in the list of publications (Table XII) will give some idea of the types of research in progress.

*Physics, Report of Dr. G. S. Langstroth*—Research grants have been held by various members of the Department during the year as follows:

(a) A National Research Council grant of \$500 to Assistant Professor Gowan for study of atmospheric ozone absorption. One feature of the project is the development of a convenient and rapid photo-electric instrument for use in the studies.

(b) A Defence Research Board grant of \$2,300 to G. O. Langstroth in collaboration with R. J. Lang for the prosecution of certain extramural projects of the board.

(c) A \$400 grant from the General Research Committee of the University to

G. O. Langstroth for aid in a research connected with spectrographic analysis. This research deals with the effect of general sample composition on intensities of spectral lines as radiated by a commonly used source. A feature of the work is the development of an optical shutter capable of acting in time periods of less than 10 micro-seconds.

(d) A grant of \$1,850 from the National Research Council to Assistant Professor D. B. Scott for a cloud chamber investigation of positive tracks from a beta ray source. Approximately 1% of the cloud chamber tracks produced from particles from certain beta ray emitters exhibit a curvature associated with positive charge. At present tracks from a uranium  $X_1$  source are being studied and other beta ray sources will be obtained from the Chalk River Section of the National Research Council.

*Political Economy, Report of Professor A. Stewart*—The Department has assisted in a number of public activities including the Taxation Commission (Mr. J. W. Judge, Commissioner), the Freight Rates Enquiry, and the Alberta Power Commission. Mr. Hubert Harries has been assisting in the preparation of the Province's case on freight rates. Mr. E. J. Hanson was highly commended by Mr. Judge for his work in connection with the Taxation Commission. Professor Stewart was Chairman of the Board of Arbitration dealing with the application of the Edmonton Transit System employees for an increase in wages.

A number of research projects have been advanced or completed during the year. These include a study of Municipal Problems supported by funds from the Rockefeller Foundation; an Edmonton Food Cost Index financed by a grant from the General Research Fund of the University; and a Poplar Markets Survey carried out by the Research Council of Alberta. The Department has continued to co-operate with the Economics Division, Dominion Department of Agriculture, in studies of land classification, irrigation and farm management, and has administered the grant made by the Provincial Department of Agriculture for his purpose. Supervision has been given to the Dairy Farm Cost Survey. Mapping and statistical work was done under the direction of the Department for the Alberta Power Commission.

*Zoology, Report by Dr. R. B. Miller*—Dr. Rowan continues to conduct his annual animal cycle enquiry. Mr. Moore is now assisting with the task of working over the returned questionnaires and preparing new ones to be sent to observers throughout the province.

Mr. Moore spent part of last summer in a survey of game conditions in the Peace River area and antelope in the south. This winter, at the request of the Game Commission, he began work on a magpie control study.

Dr. Hughes has been continuing her studies of development, particularly of anomalies.

Dr. Miller, in co-operation with the Provincial Fishery Branch, is continuing with investigations in the field of fisheries management. Studies under way include: control of whitefish parasites (part of this problem is being carried on in co-operation with Dr. Huston of the School of Pharmacy); efficiency of whitefish hatchery; management of whitefish fisheries; life histories and growth of native fishes.

During the winter reports on fisheries and waters surveyed the past summer have been prepared. To assist with this work, the Fishery Branch attached a girl to the department from November to May inclusive. Reports have been completed on

Jumping Pound drainage, Sheep River drainage, Highwood River drainage, and numerous smaller surveys.

### **Report of Dean J. Macdonald, Chairman of the School of Commerce**

The 1947-48 session brings with it the first major graduating group of rehabilitation students from the School of Commerce. It is gratifying to note that the demand by the various segments of the business world for the graduates in Commerce has been excellent, with the result that the major portion of the graduands have either been placed or have promises of placement at this time. The pattern of placement is very diversified and covers the fields of the accounting profession, teaching profession, governmental service (income tax department) and general business. The excellent service and co-operation of the National Employment Service during the past year should be mentioned in respect to the favorable placement results which have been attained in this particular field.

#### *Research*

During the 1947-48 session, a start was made on certain research work in the field of accounting and with the financial aid of a General Research Grant the services of one of the final year Commerce students, M. D. L. Brandell, were obtained for this work. One project, "Accounting Treatment of Carry Back and Carry Forward Tax Provisions re Business Losses", was completed. This is at present under review by a committee of the Institute of Chartered Accountants of Alberta. Certain additional preliminary work has been done on the topic of "Extraordinary Charges" which will not be finished until some time in the 1948-49 session. In these projects we have been working in close co-operation with both the Provincial and Dominion Institutes of Chartered Accountants.

### **Report of Professor Mabel Patrick, Director of the School of Household Economics**

Twenty-three members of the senior class have accepted student training positions, eighteen in hospitals and five in commercial or other institutions. Three have accepted positions as District Home Economists. Of the remaining eight, three plan to teach, one plans to enter the Faculty of Education next session, one plans to continue her studies, one plans to do extension work and two are undecided.

The demand for dietitians and teachers continues. There is an increasing demand for instructors for University positions. Fortunately, more graduates are doing advanced work. During this year three have obtained Master's degrees and twelve others have been studying. Of these, seven are on fellowships.

### **Report of Dean R. D. Sinclair of the Faculty of Agriculture**

The activities of the Faculty of Agriculture in the University of Alberta fall into two main divisions—(1) academic and (2) experimental. For convenience in presenting this report the work of the Faculty will be sub-divided under these headings.

It may be appropriate, however, to mention that in addition to teaching and participating in research work, members of the staff of the Faculty of Agriculture



devoted a considerable amount of time to extension work during the year. It is felt that two good purposes are served by maintaining close contact with the farm people of Alberta. Staff members are kept closely in touch with problems arising on the farm and the results of research are made available to farmers with a minimum of delay. Direct communication with farmers has been made possible through addresses at farm meetings, agricultural short courses and field days, and by means of correspondence and personal interviews. The usual bulletins and circulars have been issued and radio talks were given throughout the year on the Alberta Farm and Home Forum programme, CKUA. The Dean of the Faculty of Agriculture serves as chairman of a committee made up of representatives of the Faculty of Agriculture and the Alberta Department of Agriculture which directs the Alberta Farm and Home programme. Close co-operation was offered by all departments to the Department of Extension of the University and the Extension Service of the Alberta Department of Agriculture.

Several staff members served during the year on national committees functioning under the authority of the National Advisory Committee on Agricultural Services and on various agricultural committees operating in the provincial sphere.

#### *Academic*

The addition of a poultry unit to the Animal Science Farm during the year made for great improvement in the teaching of Poultry Husbandry.

Fifteen students engaged in agricultural research were registered in the School of Graduate Studies. Of this number eight took their undergraduate training at other institutions.

A six-months' Dairy Short Course was offered during the year under a joint arrangement between the Department of Dairying and the Dairy Branch of the Alberta Department of Agriculture with assistance from Canadian Vocational Training. Upon the successful completion of the course a diploma or certificate is granted the students, depending upon their academic attainment. During the year this course was made available to civilian students as well as veterans.

The Faculty of Agriculture co-operated with the Department of Extension in offering short courses for the Institute of Appraisers and for Sanitary Inspectors of the Alberta Department of Public Health and in sponsoring Farm Young People's Week.

The passing of Dr. Frank Archibald Wyatt during the year is recorded with deep regret. Dr. Wyatt joined the staff of the University of Alberta as Professor of Soils in 1919 and he directed the work of the Department of Soils with distinction for a period of twenty-eight years. In addition to his teaching duties, which he carried on enthusiastically, he was responsible for the direction and co-ordination of soil surveys in Alberta and for the initiation of experimental work which led to greatly increased productivity of Alberta soils, particularly in the gray wooded soil zone.

Professor J. P. Sackville retired as Professor of Animal Science in July, 1947, after a period of twenty-five years of service to the University of Alberta. Under his direction the Department of Animal Science developed into a strong teaching department and carried out a programme of experimental work of great value to the livestock industry of Alberta.

Students in the Faculty of Agriculture did good work during the 1947-48 term and particularly gratifying was the performance of student veterans. No cases requiring disciplinary action were reported to the office of the Dean. As a means of establishing close contact between staff and students a Staff-Student Relations Committee was organized during the year. A second annual Field Day was sponsored by the Agricultural Club. The student body participated enthusiastically in the various events included in the programme and a number of commercial organizations supported the event by contributing prizes and trophies.

### *Experimental*

Although the teaching load on the staff was increased as a result of an upward trend in size of classes, the research work in the Faculty of Agriculture was continued actively during the year. As in previous years, several grants were received from commercial organizations and from the National Research Council. Certain projects continued to receive assistance from a University Committee on Agricultural Research Grants.

During the year the Department of Agricultural Engineering installed a modern Taylor hydraulic dynamometer for testing the horse-power of farm motors. Observations were made on the operation of sugar beet harvesting machinery in southern Alberta and the performance of large scale land clearing equipment in use on the Wanham project in the Peace River country was studied. Assistance was provided the Alberta Department of Agriculture in conducting field days on tillage and harvesting machinery and the Department participated in the work of the National Committee on Agricultural Engineering.

Laboratory studies and feeding trials were conducted by the Department of Animal Science during the year. Work was continued on a project dealing with the nutritional value of Alberta grasses grown under different conditions of soil and climate. Results secured indicated that this line of research should be continued. Swine nutrition studies included an investigation into the influence of gestation-lactation ration on the pre-natal and post-natal development of the progeny. The effect of different treatments with iron, copper, and vitamins on nutritional anemia in suckling pigs was also studied. The use of urea in the rations of dairy cows was given further consideration. A co-operative project dealing with supplementary feeds for pregnant ewes, sponsored by the National Sheep Committee, was continued. Beef cattle investigations centred on determining the minimum amount of grain required in the finishing process to produce commercial beef of acceptable grade. High priced grain and a world shortage of grain for direct human consumption prompted this particular study. Poultry research dealt with the effect of various processes on the nutritional value of meat and fish meals and also included the formulation of turkey and chick starters and turkey breeding rations.

The twenty-sixth annual Feeders' Day was held early in June and attracted several hundred people to the University Farm to hear reports on the livestock feeding experiments conducted during the preceding year. This occasion undoubtedly makes a considerable number of new friends for the University each year.

In the Department of Dairying the National Research Council, through the Committee on Food Preservation, supported a bacteriological study on churning cream quality. Simple practical methods were found permitting infrequent delivery



of high quality churning cream. In continuing the rancidity studies the method of measuring milk lipase developed in the Department was found to be promising in the study of bacterial lipases.

Experiments conducted by the Department of Entomology in the Edmonton area showed that almost complete control of the Currant Fruit Fly (*Epochra canadensis*) is possible with a single spraying of DDT during the pre-oviposition period. Preliminary experiments with Gammexane for the control of wireworms gave promising results.

Research in the Department of Plant Science received financial assistance during the year from the National Research Council, United Grain Growers Ltd., Canada Malting Co., National Grain Company, and Naugatuck Chemical Co. This assistance is greatly appreciated. The trend toward fundamental research in this Department has been continued in nearly all branches of research.

The plant breeding work with cereals includes extensive studies with barley and soft wheat and preliminary work on winter wheat. Considerable promising hybrid barley material has been developed. Work on forage crops included a continuation of the improvement programme with Ferax alfalfa, Altaswede red clover, and Altagold sweet corn. A new project under the joint auspices of the Department and the Dominion Laboratory of Plant Pathology is concerned with the development of a strain of alfalfa resistant to crown rot.

Recommendations regarding seed treatment for grains, based largely on work done in the Department of Plant Science, were generally accepted in Western Canada during the past year. Work was carried out on the seed treatment of vegetable seeds and the ergot disease of cereals and grasses was investigated.

Work with the selective weed killer 2,4-D was expanded in 1947. Most of the research work was fundamental in nature and dealt with the effect of this chemical when injected into plants of sow thistle, wheat, and wild oats.

Research projects in horticulture included resistance of apple varieties to fire-blight injury, susceptibility of crabapples to winter injury, and chemical inhibition of shoot growth in potatoes, carrots, beets, and turnips in storage. The Canadian Seed Growers' trial gardens were again carried by the Department.

Visitors' Day was held on August 9th and drew a very good crowd. Opportunity was provided for an inspection of the work in progress in Plant Science.

Soil surveys were continued actively in 1947 by the Department of Soils in co-operation with the Dominion Experimental Farms Service and the Alberta Research Council. A report covering two and one-half million acres in the Peace Hills Sheet has been completed. An extension of an earlier irrigation soil survey east of Taber was carried out during the year in anticipation of future irrigation development in that area. In addition substantial areas were surveyed in the Peace River district. The Alberta Soil Survey is now organized under the co-operation of the Department of Soils, University of Alberta, Dominion Experimental Farms Service, Division of Field Husbandry, Agricultural Engineering and Soils, and the Research Council of Alberta.

Experimental work with commercial fertilizers and crop rotations was continued on the black soils field at Edmonton and on the gray wooded soils at Breton as well as in co-operation with a number of farmers on black and gray soils. These

investigations again showed the importance of using phosphate fertilizers on grain crops on many black soils and the very great value of sulphates when used on legume crops grown on deeply leached gray wooded soils.

The requests by farmers, gardeners, and greenhouse operators for analyses of soil samples and advice regarding soil fertility problems continue to take up considerable time in the Department of Soils but it is felt that this is a very useful service and that it helps to maintain close contact with the farming population. The research work supported by National Research Council grants on legume inoculating and soil sterilization has been continued.

In conclusion it may be in order to record that a fine spirit prevailed in the Faculty of Agriculture during the year 1947-48. Staff members extended themselves to give the best possible instruction to the enlarged classes and at the same time carry out their other responsibilities in connection with administration, research, and extension.

### **Report of Dean R. M. Hardy of the Faculty of Applied Science**

The first large post-war class entered the third year of the Faculty this session. This resulted in a series of new problems in regard to laboratory accommodation and equipment. Considerable reorganization was required of the work of the third and fourth years. The staff situation was difficult, and while junior staff appointments were fairly adequate, there is no doubt but that the senior staff again carried serious overloads.

The employment opportunities for graduates from all the Applied Science Departments are again exceptionally good. Moreover, the employment situation for undergraduates in Applied Science for the coming summer is also remarkably good considering the large number of students who are available for work.

The demand for post-graduate instruction increased considerably, due to the fact that many junior instructors were only interested in academic appointments if graduate courses were made available to them. Graduate instruction and research work were carried on in each of the Departments of Chemical, Civil, Electrical and Mining Engineering.

Two graduate students, one serving on a Shell Oil Scholarship and one on a National Research Council Scholarship, were engaged in the Department of Chemical Engineering in research on "Flow Characteristics of Clay and Limestone Slurries" and "Gas Phase Nitration of Natural Gas." One graduate student in the Department of Electrical Engineering was engaged in a research project entitled "Slots in 3-cm. Rectangular Wave Guides." In the Department of Mining Engineering one graduate student was engaged in a research project entitled "Specific Surface of Mineral Powders by the Air Permeability Method."

In the Department of Civil Engineering the equivalent of about eight full-time men were engaged on research projects during the past year. Some were engaged full-time, a considerable number part-time, and several were working on graduate programs. Work on the large soil testing program incidental to the Department of Transport Airport Evaluation Research project was continued and was largely completed during the present session. "An Investigation of Air Entrainment in Concrete and its Effects on Durability" was conducted as a graduate student project and financed by the City of Edmonton. A graduate

student project was also undertaken entitled "Mechanical Treatment of Topsoil for Use in Highway Embankments." This project was suggested by the Alberta Research Council following a request from the Department of Public Works of the Province. The Department supervised and made available the facilities of the Soil Mechanics Laboratory for a project entitled "Highway Research" under the auspices of the Alberta Research Council. A program entitled "A Survey of the Foundation Conditions in the Edmonton Area" was also handled by the Department under a grant from the National Research Council. The Department also supervised a project entitled "Rural Sanitary Facilities" financed by the Central Mortgage and Housing Corporation in co-operation with the governments of the three Prairie Provinces.

A significant development in the research work being done in the Civil Engineering Department is the fact that the work is being conducted in co-operation and with the financial support of other interested organizations.

After careful study a decision was reached to expand certain courses to provide for specialized training in fields concerned with the development of the natural resources of this province. A degree course in Petroleum Engineering was planned to commence with the session 1948-49. The curriculum of the Mining Department was reorganized to provide for a series of options to suit the interest of students primarily interested in a career in the Coal Mining industry. An organization was established to permit a select group of students to proceed from the second year of Applied Science to a specialized course leading to a degree in Engineering Geology. In co-operation with the Faculty of Agriculture it was decided to offer a course through the Department of Civil Engineering leading to a degree in Irrigation Engineering. Students will be accepted for this course from the second year of Applied Science commencing with the session 1948-1949. The Faculty of Applied Science also agreed to offer two optional courses to students in the Faculty of Agriculture who are interested in Irrigation as applied to agricultural practice. At the present time there is a considerable demand for graduates with these specialized types of training in this province and it is anticipated that this demand will increase within the next few years.

In view of the fact that the work of this Faculty concerns itself with the basic training of students for entrance into the various engineering fields it was decided to change the name commencing with the session 1948-1949 to the Faculty of Engineering.

### **Report of Dean W. Scott Hamilton of the Faculty of Dentistry**

While not as great as the previous session, the number seeking admission to Dentistry is still more than we can possibly accommodate, and it appears that the same condition will exist next year. There are approximately forty-five taking either pre-dentistry or second year of the combined courses. The Registrar's office already has on file a goodly number of applications from outside points. Enquiries are being received from foreign countries such as China, South America and others.

During the year members of our faculty have given short extension lectures and clinics in different cities of Western Canada. It is our hope that we may soon be in a position to extend this service much further.

We are looking with enthusiastic pride to the opening of our new dental clinic. Construction is well on the way and everything will be in order for the beginning of next session. This clinic has been designed in accordance with the latest developments in dental science for the benefit of both our students and the patients whom we treat.

## **Report of Dean M. E. LaZerte of the Faculty of Education**

### *Calgary Branch of the Faculty*

In September 1947, the program at Calgary was expanded to include the second year of the B.Ed. Lecture rooms and laboratories have been built in one of the large huts adjacent to the main building, which is occupied jointly by the Faculty of Education and the Institute of Technology and Art.

### *Investigations and Research*

The Faculty of Education is expanding its program of Supervisory service in the Clover Bar School Division. The following projects have been undertaken during the present school year.

1. Remedial Reading Programme is being conducted in Great West Schools where marked retardation was discovered.
2. Health enterprises are under way in Rabbit Hill and Clearwater Schools, where two inexperienced teachers are in charge of the work.
3. A science project along the lines suggested in the latest revision of the Elementary Programme of Studies is being conducted in Oliver School District.
4. A rather comprehensive English survey was made in the Leduc High School by the English staff and the senior students of the Faculty. A remedial programme based on the findings of the survey is now in progress.
5. In two of the larger urban schools of the Division, viz. Fort Saskatchewan and Griffin, a testing program in Mathematics was completed.
6. In co-operation with the Department of Education, guidance clinics are being conducted in East Clover Bar and Calmar districts.
7. The Dean of the Faculty is Chairman of a Committee of the Canadian Education Association charged with the responsibility of studying and reporting at the September 1948 conference on "Canada's Teaching Personnel." The Dominion wide study has been carried out under the Dean's direction by five graduate students of the Faculty of Education. The investigation covers the topics:
  - (a) Function of the school.
  - (b) The Teacher Shortage: Causes and remedies.
  - (c) Recruitment selection and training of Teachers.
  - (d) Prestige of the Teaching Profession: Standards, Prestige.
  - (e) The Teacher and the Community.

### *Rural Supervisory Programs*

In addition to the work undertaken in Clover Bar School Division all members of the Faculty of Education staff went out for the weeks May and June to visit rural schools in various Divisions of the Province and give assistance to teachers having difficulties with specific problems.



## **Report of Acting Dean F. W. Bowker of the Faculty of Law**

### *Teaching Staff*

For the first time in the history of the Faculty the teaching staff consisted of three full-time members: the Acting Dean, Mr. Alex Smith of Edmonton and Mr. Leonard Hawco, a former Rhodes Scholar from Newfoundland. Addition of Messrs. Smith and Hawco to the staff has been a most satisfactory solution of the very serious problem which the faculty has faced in the past few years of obtaining an adequate full-time staff.

Practising barristers have continued to give invaluable help as sessional instructors, although it was not necessary to call on them to teach as many courses as in the preceding two sessions. The sessional instructors are: L. Y. Cairns, K.C.; R. Martland, K.C.; G. W. Auxier, K.C.; A. T. McLean.

Geo. H. Steer, K.C., Acting Dean during the two sessions prior to the present, has retired from part-time teaching. Ever since the Law School was founded he has taught several of the most important and difficult courses. One of the outstanding lawyers in Alberta, he gave the benefit of his special knowledge of property law and equity to every student who ever graduated from this faculty up to the spring of 1947. It is doubtful if anyone will ever again be found who can or will render such valuable service over such a long period of time, while carrying on a busy private practice. Fortunately he has been made Honorary Professor of Law so the faculty will continue to have the benefit of his advice.

### *Curriculum*

Both in the United States and Canada there are various movements on foot to modernize the law school curriculum and to adapt methods of teaching to present-day needs. These have all been given careful study and it is proposed to revise the curriculum when details are settled and the teaching staff can implement the change.

### *Employment of Graduates*

There is a serious shortage of lawyers throughout the province. All of the 17 graduating students found offices in which to article months ago and many firms who badly require a student must go without. There is little likelihood of relief until 1950 when the first large class will be graduated. In most, if not all, of the other western provinces and Ontario the enrolment is much heavier than here and the demand comparatively smaller. This may result in a migration of young graduates to Alberta.

### *Graduate Study*

Four graduates of this faculty are pursuing their studies elsewhere: two at the Harvard School of Business Administration, one at the Harvard Law School and one at the University of Toronto. The pursuit of graduate work is a fairly new development and is to be encouraged.

### *Law Society of Alberta*

The profession continues to show an intense interest in the support of the law school, and the relationship between the faculty and the Law Society of Alberta continues to be of the best.

## **Report of Dean J. J. Ower of the Faculty of Medicine**

Pressure of applications for first year Medicine, overwhelming here as everywhere on this continent, necessitated a very careful study of the situation in order to accommodate as many veterans as possible without unduly penalizing high standing civilians. To overcome this a special scheme of selection was submitted to the Board of Governors for consideration and, this being approved, arrangements were carried through to accept every veteran who had qualified and also a few very well qualified civilians. It is felt that the veteran peak has been passed and the majority of the necessarily deferred and qualified civilians can be absorbed moderately quickly and be able to proceed with their medical courses.

The expanded number of first year acceptees (50) presented the Faculty Council with the future, but now to be considered, problem of supervising the hospitalization of a larger graduating class than could be accommodated in residence in affiliated Edmonton hospitals. In addition it was found that the shortness of the Alberta medical session was not, in the eyes of those administering certification of graduate training and specialist programmes, fully compensated by the twelve months of undergraduate internship. When equated with the four-year course plus a junior graduate internship programme of eastern medical schools, the Alberta curriculum showed approximately three months' deficiency. This was having effect of penalizing certain of our graduates when applying for some very desirable positions leading to more advanced training in Medicine.

An intensive study of the situation was undertaken and the Faculty Council, after some weeks of careful deliberation and consultation, recommended that the undergraduate internship be dropped from the course, the session extended by approximately a month and the course be reduced to four years, which would bring it into the general pattern on this continent.

With the approval of the University authorities it was decided to convert the medical course to the new pattern at once, with the result that there will be two graduating classes in Medicine presented at the spring Convocation, one representing a five-year (including internship) training and the other four years' training which, in the case of this particular class only, will be augmented by a special programme of teaching during the residence in approved local city hospitals next session.

With the cessation of the stress imposed by acceleration during the war and the gradual filling of staff vacancies, research is assuming a more important role in faculty activities and almost every department is undertaking, in proportion to its facilities and staff for so doing, a research programme. The faculty sponsored Medical Research Club, the purpose of which is to study and correlate local research in the Medical Sciences, has been very active this session and at the last meeting changed its name to the Collip Research Club in order to honor one of our distinguished medical graduates who has been very sympathetic to our research problems. A statement of the various research projects recently published and at present in progress within the Faculty, is given in Table XII.

The annual refresher course, undertaken by the Faculty of Medicine in conjunction with the College of Physicians and Surgeons of Alberta, took place in the week of May 10th. As noted in last year's report, a plan of graduate training for the Medical Specialties is being undertaken, with the approval of the Com-



mittee on Graduate Studies, for a limited number of trainees. It is still in the experimental stage and no detailed programme of studies has as yet been submitted for formal approval.

The relationships between staff and students have at all times been very good and the co-operation of the latter during this period has been all that could be desired.

### **Report of Professor Helen E. Penhale, Director of the School of Nursing**

The School of Nursing of the University of Alberta has completed another year of progress in the advance toward the aim of a well organized, integrated and carefully guided program of scientific, social and professional instruction and experience which will develop expertness in nursing care in the home, in the hospital and in the community.

The reorganization of the School has been accomplished with Miss Helen Penhale as Director and Miss Helen Peters, Miss Madeline McCulla, Miss Francis McQuarrie as Assistants. Miss Penhale divides her responsibilities between the direction of the undergraduate program and the course of studies for the post-graduate program in Teaching and Supervision in Schools of Nursing. Miss McCulla is responsible for the teaching of the "Health and Social Aspects" in the basic curriculum and has given considerable time to the educational program for the students in the community affiliations arranged.

Miss Helen S. Peters was away for two months in the fall travelling through Eastern Canada and the Eastern United States observing in other Hospitals and Schools of Nursing.

The major problem with which one has to cope in Education and Administration is that of unstable staffs. Resignations and new but temporary appointments make continuity of service and qualitative teaching and nursing service very difficult and discouraging to those who must accept the major responsibility. Clinical instruction has been the most uncertain during the past few years. Clinical instructors have been appointed as planned for last year, to surgical, orthopedic, outpatient, and operating room service.

The Advanced Course in Practical Obstetrics was again offered for the four months of September to January. The three students enrolled successfully completed the course and are now in District Nursing positions with the Alberta Provincial Department of Health. This is the type of work in which the nurse assumes responsibility for the prenatal and delivery care of women in isolated areas. The instruction the nurses receive in the Course in Obstetrics enables them to perform their duties with greater confidence and ability. A maximum number of students are expected in the fall class of 1948.

A three-day Institute is being conducted in May in Guidance in Nursing under the auspices of the Department of Extension of the University of Alberta and the School of Nursing. It is hoped that nurses from many parts of Alberta will attend this short period of instruction, as it is considered an excellent educational opportunity to learn more about guidance principles in the field of nursing.

The members of the staff of the School of Nursing have assumed an active role in nursing activities in their own school, in Edmonton and in the Province. Miss Penhale has continued as Chairman of the Educational Policy Committee of

the Alberta Association and Secretary-Treasurer of the Provisional Council of University Schools in Canada. Miss McCulla has carried on the activities of the Nurse Practice Act Committee, and functioned as the President of the University of Alberta School of Nursing Alumnae and the President of Edmonton District No. 7 of the Alberta Association of Registered Nurses.

The staff of the School of Nursing continues its efforts to establish and to promote improved nursing education in order to take a prominent place amongst the better schools of America. This takes time, effort and money, and at times the total picture is discouraging, but with determination and slow but certain progress, greater developments are anticipated.

It might be mentioned in closing that the first year of existence for the new Nurses' Home has contributed materially to a greater feeling of rapport and kinship within the ranks of the student body and the Alumnae of the School. The spacious comfort and the opportunity offered for relaxation will be beneficial to the welfare of the students.

### **Report of Dr. M. J. Huston, Director of the School of Pharmacy**

Due to the fact that there were more applicants than could be accommodated, it was necessary to establish a quota of 51 in the first year of the course. Those applicants who were not accepted continued their internships in dispensaries throughout the province. Applications for next year indicate that a similar situation will obtain at that time.

In addition to the regular classes in Pharmacy, lectures in *Materia Medica* were again given to two classes of nurses at the University Hospital.

Four graduate students continued work towards M.Sc. degrees in this department.

#### *Experimental*

The Canadian Pharmaceutical Association has requested the Canadian Conference of Pharmaceutical Faculties to undertake the revision of the Canadian Formulary. The School of Pharmacy of the University of Alberta has been assigned the revision work on the preparations for external use. During the year a large number of preparations have been formulated, tested and compared in order to obtain the most satisfactory for inclusion. Much of this work was undertaken by senior students under supervision of the staff.

Work has continued on the development of sensitive photofluorometric test for crystalline and urinary estrogens and androgens. A number of chemicals related to the carcinogens has been synthesized and tested for estrogenic potency.

A satisfactory perfusion device for the isolated dog leg was devised and used to test the effect of certain drugs on the response of striated muscle to nerve stimulation. The effects of some central nervous system depressants, analeptics and antihistaminics on muscle response were also investigated on the intact animal.

Two chemical assay methods for penicillin were compared. Efforts were made to obtain a procedure to prevent the destruction of thiamin by iron compounds.

This department co-operated with the Department of Zoology on research aimed at the control of tapeworm in fish.

Two grants in support of research were received from the Canadian Foundation for the Advancement of Pharmacy.

#### *Extension*

The School of Pharmacy, with the Edmonton Retail Druggists' Association, sponsored a series of six meetings on the "Profession of Pharmacy." Papers on pharmaceutical topics of interest to students and to practising pharmacists were presented and scientific films shown.

The School of Pharmacy also organized a two-day Refresher course in conjunction with the annual meeting of the Alberta Pharmaceutical Association.

Three extension bulletins covering recent advances in Pharmacy were prepared and circulated to the pharmacists of the province.

During the year members of the staff presented a number of papers to service clubs, professional societies and similar groups. In addition many inquiries concerning practical problems in Pharmacy were answered.

### **Report of Dean J. MacDonald, Chairman of the School of Graduate Studies**

The large number of students carrying on graduate work with the assistance of the Department of Veteran Affairs accounts for the heavy registration in the School. In this connection, I would like to say that there is likely to be a considerable number of applications from undergraduate D.V.A. students who are completing their undergraduate course this spring. Such of these students as the University recommends will be favorably considered for continued assistance from D.V.A. in graduate work. I have, therefore, requested the departments in this faculty to give attention to the question of the number of graduate students they will be prepared to accommodate and supervise without prejudice to the other duties they have to perform.

The distribution of candidates according to departments has been as follows:

Animal Science .....	4
Applied Science .....	23
Bacteriology .....	1
Biochemistry .....	3
Chemistry .....	12
Dairying .....	2
Education .....	64
English .....	9
Entomology .....	2
History .....	12
Geology .....	6
Modern Languages .....	5
Pharmacy .....	4
Philosophy and Psychology .....	14
Plant Science .....	5
Political Economy .....	3
Physics .....	5
Soils .....	2

Zoology .....	3
Special Grads. ....	28
<hr/>	
Total .....	207

### *Recommendations for Degrees*

The number of students recommended for Master's degrees at Convocation in May, 1949, are as follows:

M.A. ....	6	M.Sc. (App. Sci.) .....	5
M.Sc. ....	9	M.Ed. ....	6
M.Sc. (Agr.) .....	5		

### **Report of the Librarian, Miss Marjorie Sherlock**

During the year 1947-48 every department in the Library felt the effects of the increased student registration. In the Reference and Circulation Department and the Branch libraries in particular the increase in service, as the large classes of students progress from their first to their senior years, has been very marked.

#### *Staff*

The staff of the Library consisted during the past year of 19 full-time members (nine of whom were professional librarians), four half-time assistants, and a delivery boy.

Thirty-six student assistants were employed in the Library for varying periods weekly, many of them as Supervisors in the two Library Study Rooms. The policy was continued this year of employing students who intend to enter the library profession for desk work so as to give them experience. Three such students who will graduate this spring are already enrolled for the fall term at Library Schools, and a number of others have planned their courses here with a view to taking library training later.

#### *Quarters*

With a registration of some 4700 students and the addition of more than 10,000 volumes to our collection during the past year, the problem of space has become very acute. Additional shelving has been added wherever possible but some thousands of less-used books have had to be placed in dead storage until we move to the new building.

#### *Cataloguing and Orders*

During the year the Department ordered 4701 titles, accessioned 6820 volumes, catalogued 10,340 volumes (including 626 bound journals), lettered 7378 volumes, withdrew 223 volumes, and typed 30,966 cards. The Chief Cataloguer and an assistant again spent May and June in Calgary, continuing the re-cataloguing of the Education Library there.

With the removal of the Hospital Nursing School library from the Hospital to the new Nurses' Residence, it was found to be in need of cataloguing and classification and our help was sought by the Director of the School. This library is not a part of the University Library, but we were glad to be of assistance. The entire collection was re-shelved, labelled and put in order by our Cataloguing

Department, a card catalogue made for it, and some 200 additional volumes classified. In January 1948, at the request of the Hospital Board, the University Library took over the ordering, cataloguing and preparation of books for this collection, on a cost basis.

### *Reference, Circulation and Periodicals*

The heavy registration of the session has been very evident in the increased activity of this department. During the day-time hours (from 7:45 a.m. to 5:30 p.m.) the Main Reading Room, seating 81 readers, was filled to capacity. During the evenings (7-10 p.m.) a total number of 15,779 readers used this room, as compared with 9,188 evening readers last year. The Library Study Room across the rotunda, seating 75 readers, was used to capacity by 43,639 readers during supervised hours (9 a.m.-5 p.m.) and by a large but undetermined number at other times.

In addition to the reference service given to faculty and students, this department is responsible for periodicals, government documents and pamphlet material, inter-library loans, and the binding of all books and journals for the entire University Library. During the year 955 current periodicals were ordered and recorded (an increase of 65 over last year), 1851 volumes were prepared for binding, an increase of 966 volumes over 1946-47. Foreign periodicals, unobtainable during the war years, are becoming available once more and every effort is being made to build up the gaps in our files for that period, with a consequent increase in our binding work.

During the year 153 volumes were borrowed for staff members on Inter-library loan, and 42 volumes loaned to other libraries. Twelve microfilms and 10 photostats were also obtained for those engaged in research problems.

Circulation statistics soared again this past year. In 1946-47 the Main Library circulation, 64,460, was double that of the preceding year. In 1947-48 the figure increased to 80,945, which includes: Books and periodicals from the Stacks, 21,642; books from the Reserve shelves, 59,303. The Reserve collection in the Main Library now consists of 126 shelves containing the required reading for 91 courses—more than 3,000 volumes in all. Extramural loan borrowing during 1947-48 was almost double that of last year; 1,278 books were sent out by mail to 415 registered borrowers.

### *Branch Libraries*

*Education Library (Edmonton).* During 1947-48 the Education Librarian, with two full-time assistants, circulated 53,648 books, an increase of 13,864 over last year's figure. Both the Education Reading Room and Library Study Room were used to capacity. The latter is open at all hours for the students' use, although it is not supervised after 4:30 p.m. During the year 23,197 readers made use of this room, an increase of 6,540 over 1946-47.

*Education Library (Calgary).* This library has had a very successful year, with a substantial increase in books, pictures, periodicals and equipment. When the University decided to offer six courses in Arts at Calgary, a good foundation collection of books in these fields, as well as a basis reference collection, was added to the books on Education already in the library.



Miss Grant, Education Librarian, and a half-time assistant, circulated an average of 200 books a day during the session, and approximately 300 readers used the library daily.

*Medical Library.* Circulation statistics for the year are: Reserve books (for over-night use), 4,509; books from the Stacks, 2,153; journals and pamphlet material, 3,901; a total of 10,575. This is an increase of 33.7 per cent over last year's total of 7,901. Circulation of reserve books for use in the Library, of which no systematic count is kept, was correspondingly increased. A total of 2,701 items were circulated to city and rural doctors.

Subscriptions to medical journals numbered 237, of which 27 were new.

*Law Library.* The great increase in registration in the Law Faculty since 1945 necessitated the addition of a second reading room adjoining the Law Library, to accommodate the extra students and new books.

Much effort and money was expended during the year to bring our collection of Law books up to a proper standard, by the purchase of new books and sets, and by the binding or re-binding of hundreds of volumes already in the library. One valuable item which we were able to secure—a duplicate set of English Law Reports—enabled us to remove our former set from use long enough to save it, by rebinding, from complete disintegration.

#### *Branch Reading Rooms*

*Agriculture Reading Room.* Very extensive use was made of this reading room, which accommodates some 20 readers and several thousands of the books most used by students of Agriculture. This past year 9,179 readers used the room, and 3,946 books were circulated, as compared with 2,985 readers and 1,402 books in 1946-47.

*The Chemistry and Nursing Reading Rooms,* each seating about 30 readers, and containing most of the books in their fields, were used to capacity during the session. Owing to the large number of students using the *Mining Reading Room* it was found necessary to completely reorganize the book collection, and to employ a half-time assistant there.

#### *Stock of Books*

During the year 3,942 volumes were added by purchase, and 332 by gift, giving us at March 31, 1948, a total of 93,850 accessioned volumes. In addition there are about 13,000 volumes as yet unaccessioned in the Education Library (Edmonton) and some 10,000 volumes in the Education Library (Calgary) giving a total book stock in the University Library system of approximately 116,850 volumes.

#### *Radio Talks*

During the past winter 22 weekly book talks were given by staff members of the University Library and Extension Library in the series *Books at Random*. This is the third season that this series has been presented over CKUA.

The Librarian wishes to express her appreciation of the unfailing loyalty and co-operation of the library staff, without which it would have been impossible to provide, with existing facilities, the expanded service described in this report.



## Report of the Provost, Professor H. T. Sparby

### *Student Government*

During the past term the Students' Council, under the strong leadership of Mr. George P. Hartling, has given effective direction to student affairs on the campus. Mr. Hartling and his Council have indicated on all occasions a willingness to accept responsibility for the direction and control of all student organizations and their activities. They are deserving of congratulations for having discharged this responsibility efficiently and well.

### *Students' Union Building*

For several years the erection of a Students' Union Building has been a favorite topic for discussion and study on the campus. Now it appears that these plans, at least in part, are about to be realized. Twelve months ago a Students' Union Building Advisory Board was set up. This Board, under the able chairmanship of Mr. W. G. Pybus, has given much time to studying detailed building plans and investigating financing possibilities. The culmination of the board's work came on February 4, 1948, when the student body, on a building referendum, voted 1,484 to 501 in favor of a plan calling for the early construction of the first unit of the building. This unit will contain office space for Students' Union business, lounges, cafeteria, and other facilities for student social affairs. Construction is scheduled to begin in 1948 and will be financed by \$100,000 already in the Students' Union building fund, together with a provincial government \$400,000 interest-free loan, repayable over a 20-year period.

### *University Residences*

The past year has been a particularly successful one for all three University residences. The wardens, Miss C. I. MacFarlane, Mr. A. A. Ryan, and Dr. D. M. Healy, have carried out ably their supervisory duties. They report that the students' house committees, under the chairmanship of Miss Margaret Coates and Mr. Jack Armstrong, have functioned efficiently. Several social affairs held in Athabaska Hall for resident students were well planned by the house committees and thoroughly enjoyed by the large numbers of students who attended.

### *Student Organizations and Clubs*

As the enrolment at the University during the past few years increased, it was natural that the number of student organizations and clubs should also increase. During the past year, however, although a few new organizations have been started, there were indications that two or three of the established clubs were becoming less active. It is probable, therefore, that a peak in the number of student organizations is being reached. With respect to proposed new organizations, the traditional policy of requiring them to solicit the approval of the Students' Council before receiving recognition as a legitimate University organization continues to be followed.

Several organizations continue to carry on activities which contribute a great deal to the cultural life of the University and which give much pleasure and enjoyment to the student body as a whole. The Mixed Chorus, the Symphony Orchestra, the Ballet Club, and the Dramatic Society have all achieved a high degree of success in their year's work, and rightly deserve the feeling of pride which the University has for them.

In athletics, too, the season has been a successful one. Among numerous outstanding events, two of the high-lights were the rugby game last fall with the University of Toronto and the final game of the hockey series with Saskatchewan when the Golden Bears rallied to win the Halpenny trophy.

#### *Social Activities*

There have been several very successful formal functions during the past year. The majority of these were held over town at either the Macdonald Hotel or the Trocadero Ballroom. The planning of these affairs was very ably handled in each instance by the sponsoring student organization, and the manner in which the dances were conducted reflects favorably on the student body of the University.

There has been some expression of opinion among students that a larger number of informal dances on the campus is desirable, even if this means a decrease in the number of formal functions.

No record of student activities on the campus would be complete without paying tribute to the invaluable contributions made by Miss M. Simpson, Adviser to Women Students. She shows consistently a keen interest in every event, and the student committees who are responsible for the planning and direction of social functions seek her valuable advice on every occasion.

#### *Discipline*

Student behaviour in general during the past year has been very good, and the willingness of the Students' Council and the Enforcement and Disciplinary Committee of the Students' Union to co-operate in dealing with the few cases that have arisen has been most gratifying.

### **Report of the Chairman of the Committee on Physical Education, Dr. P. S. Warren**

The training in the Department of Physical Education continued to expand this year, on account of the greater numbers taking the required courses and through the introduction of a more varied program of activities. Due to the increased enrolment at the University, with the resultant difficulties involved in timetabling laboratory hours for classes, the organization of classes in Physical Education suitable for all grades of students became almost impossible. This difficulty, however, will decrease as the enrolment in the first two years at the University decreases, since the number of laboratory sections in the science departments will be smaller.

The total number of students registered in the Department of Physical Education in the prescribed course for the year was 910, of which 617 were men and 293 were women. The great majority of these students are in the Faculties of Arts and Science, Agriculture and Engineering. The students in the Faculty of Education do not take the prescribed course of Physical Education, but take instead a special teacher-training program in Physical Education. This work is done under the Department of Physical Education and includes 447 students. The teacher-training programme involves a considerable amount of lecturing by the Department.

The Department of Physical Education was instrumental in introducing a program of intramural sports during the year. These are competitive sports for

the benefit of the senior students who lack the necessary time or ability to participate in sport at intercollegiate or inter-Faculty levels. This program was well organized and carried out, and proved to be of great interest to senior students. The Department was also called upon to give a great deal of assistance in organizing and coaching various sporting activities under the jurisdiction of the University Athletic Board. Most of the teams that were so successful in intercollegiate sports were coached by members of the Department.

Absenteeism from the classes in the prescribed course of Physical Education is still a problem. Several students are being reported to their respective Faculties as having failed in their attendance. The attitude of a small percentage of students toward physical exercise is poor and, even though attending the class, they show great unwillingness to participate wholeheartedly in the exercise, and use every possible excuse to stay away. This type of student will continue to be a problem.

### Report of the Director of Medical Services, Dr. J. W. Scott

Cases totalling 93 treated during this session by admission to the University Hospital are listed in the following table.

**Table XIII—Medical Service Cases Admitted to University Hospital**

<i>Medical</i>		<i>Surgical</i>	
Tonsillitis .....	1	Fractured Nose .....	2
Pneumonia .....	8	Appendicitis (observation) .....	12
Diarrhoea .....	2	Fractured clavicle .....	2
Suspect Diabetes .....	1	Dislocation Medical Meniscus .....	1
Frozen Fingers .....	1	Dislocation vertebrae .....	1
Rheumatic Heart Disease .....	1	Appendectomy .....	15
Bilateral Pleuritis .....	1	Dislocation cartilage .....	1
Pneumonitis and Otitis .....	1	Fracture tibia .....	1
Investigation Cancer .....	1	Removal cartilage knee .....	1
Pleurisy and effusion .....	1	Fracture thumb .....	1
Diabetes .....	3	Fracture ankle .....	1
Multiple Sclerosis .....	1	Dislocation shoulder .....	3
Carbuncle .....	1	Low back strain .....	2
Duodenal Ulcer .....	2	Dislocation cervical spine .....	1
Flare-up old tuberculosis .....	1	Torn tendon .....	1
Gastric Hemorrhage .....	3	Fracture wrist .....	1
Skin conditions .....	8	Contusion leg .....	1
		Torticollis .....	1
Total .....	37	Knee operation .....	1
		Suture repairs .....	5
		Injury hand tendons .....	2
		Total .....	56

Three students were treated in other hospitals.

**Table XIV—Infirmary Report**

<i>Student Population</i>		<i>Infirmary Capacity</i>	
Male Students .....	3,791	Male Beds .....	7
Female Students .....	1,150	Female Beds .....	6
<hr/>		<hr/>	
Total .....	4,941	Total .....	13

*Freshmen Medical Examination*

Male .....	953
Female .....	422
<hr/>	
Total .....	1,375

*Doctor's Visits and Consultations*

Infirmary visits .....	252
Consultations in Infirmary .....	3,931
Daily average of Infirmary consultations .....	19
To Infirmary Bed-patients .....	870

*Daily Out-patients' Treatments and Consultations*

Male .....	6,814
Female .....	2,462
<hr/>	
Total .....	9,276

Daily average of Out-patients .....	49
For Session 1946-47 .....	38.6

*Summary of Infirmary Bed-patients*

<i>Patients</i>	<i>Number</i>	<i>Hospital Days</i>	<i>Average Stay</i>
Male .....	133	597	4.4 days
Female .....	66	375	5.3 "
<hr/>		<hr/>	
Totals .....	199	972	4.8 "
For Session 1946-47 .....	230	1,057	4.8 "

**Table XV—Injuries Due to Sports Activities**

Sport	No. of Cases	Cost of Treatment
Archery .....	2	\$ 5.00
Badminton .....	10	36.00
Ballet .....	1	10.00
Basketball .....	49	205.00
Bicycling .....	1	10.00
Boxing .....	11	21.00
Curling .....	1	.....
Football .....	2	18.00
Hockey .....	59	487.05
Mountain Climbing .....	1	7.00
P.E. and P.T. ....	39	462.00
Rugby .....	26	102.00
Skating .....	9	13.00
Skiing .....	6	197.50
Sleigh-riding .....	6	18.00
Soccer .....	10	45.00
Swimming .....	1	.....
Tennis .....	3	6.00
Tobogganing .....	2	74.50
Track .....	3	5.00
Tumbling .....	2	.....
Vaulting .....	1	56.00
Volleyball .....	5	6.00
Wrestling .....	7	92.00
<b>Total</b> .....	<b>257</b>	<b>\$1,876.05</b>

### *Staff*

The Infirmary staff for 1947-48 session comprised: Dr. J. W. Scott, the Director of Medical Services; Dr. J. F. Elliott, the Infirmary Physician; and Dr. M. M. Cantor, Dr. Kidd, Dr. Berezan and Dr. L. M. Sinclair, Assistant Infirmary Physicians; Dr. M. Hutton, Gynaecologist. Consultants who visit the Infirmary: Dr. Gourlay, Dr. Mewburn, Dr. Rentiers and Dr. McPherson. Infirmary Nurses comprised the Matron, First Assistant, Second Assistant and a Practical Nurse, also relief nurses as required. Sub-staff consisted of a cook and a housekeeper. For the first time the services of a part-time stenographer were obtained.

### **Report of the Adviser to Student Veterans, Dr. A. J. Cook**

#### *University Admissions and Registration*

There were 485 student veteran admissions in September, 1947. The procedures worked smoothly, arrangements having been made well in advance to have the last terminal tests in August.

There was a sizable group of faculty transfers, mostly due to failure. The Department of Veterans' Affairs supplied two counsellors during registration to



assist me in the counselling necessary to the completion of these changes of registration.

### *Failures and Supplementals*

The policy which allowed the student veteran to have supplementals as needed, seems to have been justified. Serious failures were interviewed by the Deans and recommendations as to supplementals made accordingly. The data for serious failures are interesting:

#### *Three Failures*

Failed 3 finals (granted supps.) .....	52
Did not write supps. ....	12
Passed all or all but one supp. ....	23
*Failed 2 or 3 supps. ....	17

#### *Four or More Failures*

Failed 4 or more finals (granted supps.) .....	35
Did not write supps. ....	19
Passed all or all but one supp. ....	6
*Failed more than one supp. ....	10

\*Such students thereby lost training allowances.

Many would not return to the University.

In consequence of this seemingly liberal policy, there were no cases of failure where the men felt aggrieved. At least neither D.V.A. nor I ever heard of them. Yet there was effective elimination of the unfit.

There seem to be hints here that the personal or psychological approach is better than a legal or prescriptive one. Should not all cases of serious failure be treated individually?

### *Pre-Matriculation Schools and Refresher Courses*

Schools were operated at Edmonton and Calgary until the middle of August, 1947. The school at Edmonton was then closed, arrangements were made to conduct all refresher courses under University auspices in September 1947.

Courses were given in the following subjects with numbers in attendance as noted: Chemistry (75); French (13); Mathematics (102); Physics (108).

All instructors reported a fine student attitude.

The Pre-Matriculation School Committee held its final meeting on April 22, 1948. Two points of interest are noted:

- (1) Two studies of groups of students who took placement tests are in progress. Apparently the placement tests have been remarkably successful in screening and in serving as dependable guides for counselling. The surplus tests are being turned over to the Department of Education, and further use may be made of them.
- (2) Mr. J. H. Ross stated that an effort has been made to establish a pre-matriculation school for the prairie provinces, but with little probability of success. He stated that the veterans' scheme had pretty well cleared the country of men with interrupted education, but that in a few years



the back log of such men and women might be considerable, particularly if times get hard.

#### *Student Veteran Loan Board*

From September 1947 until April 1948 inclusive a total of 54 loans were granted to the total amount of \$10,100.00.

With increased dependents' allowances and with the ceiling removed from wife's earnings, pressure on the loan fund may be eased.

There were no loans to freshman veterans granted during 1947-48.

#### *Student Housing*

The married men's suites were administered by C.U.R.M.A. as last year. The University and the Students' Union operated jointly a Student Housing Service for general accommodation during late August and September 1947. This service was for all students and proved very satisfactory. A University Housing Committee has been constituted, of which the Provost and Bursar are members, together with representatives of the Students' Union and C.U.R.M.A.

#### *Co-Wed Club*

The Co-Wed Club for the wives of student veterans was formed this winter and the response was remarkable. The interest has been sustained throughout the winter and undoubtedly this club has meant a great deal to married student morale. The advisory committee was made up of members of the Department of Extension Staff and the Alumni Secretary and has given splendid leadership. Thanks are also due to members of the various University departments who gave of their time to helping with the various group activities. This Club is unique in Canada, and is an excellent example of sound adult education.

#### *Canadian Advisory Services Conference*

The conference, sponsored by the Universities Advisory Committee and D.V.A. was held in Quebec City, June 17-22, 1947. The conference was well attended by the Canadian University representatives and by Dominion Government officials (Veterans Affairs, Labor, Employment).

Our contribution to the program concerned Student Veteran budgeting. The conference, subject to the approval of the Universities Advisory Committee, formed itself into a permanent body concerned with matters of counselling in the Universities, to meet annually if possible.

#### *Student Counselling*

The general impression I have of this year's work is that the students have made increasing use of the Advisory Service. My time has been fully occupied through the session.

There have been fewer cases this year where psychiatric assistance was needed. The D.V.A. medical services have been most co-operative in such cases.

Beginning May 15, 1948, the Advisory Service will be absorbed by the administrative officers, the Registrar and Deans.

## **Report of the Commanding Officer, University of Alberta Contingent of the Canadian Officers Training Corps, Lt.-Col. M. L. Van Vliet**

A total of 92 Officer Cadets attended the various Corps camps during the summer of 1947, of whom 75 successfully completed the training. Two other Officer Cadets ceased training at their own request, so that there remain 73 Cadets in the Contingent who completed summer training. Eleven of these will be graduating in 1948 and at least two and possibly three of the number will be entering the Active Force, the remainder receiving their Commissions in the Supplementary Reserve.

During the year lectures have been delivered in Military Geography by Dr. P. S. Warren, and in Economics of Defence by Professor A. Stewart. Military Organization and Tactics were given by Major M. J. Egan, the Resident Staff Officer, and by Major J. R. Stafford, one of the Contingent Officers. Forty hours' lectures in all were delivered in the different subjects.

A total of 45 new cadets has been accepted for training this year, so that total unit strength going to summer training will be 107, the graduating students being excluded from the total. The pattern of distribution between the various Corps is similar to last year but difficulty was again experienced in obtaining sufficient suitable candidates for the technical Corps for which enrolment in the Faculty of Applied Science is a prerequisite.

## **Report of the Commanding Officer, University Naval Training Division, Lieut. R. E. Phillips**

Due to pressure of work resulting from his own studies and instructional work for the University, Lieut. (SB) G. F. Dalsin, R.C.N.(R), resigned from his duties as Commanding Officer U.N.T.D. in the fall of 1947. Mr. R. E. Phillips, of the Electrical Engineering Department, was asked to take on these duties and was taken on the R.C.N.(R) Active List.

Shortly after registration, 25 new students were enrolled in the U.N.T.D. This brought the nominal list up to a total of 51. The maximum complement is still set at 65. After several parade nights it was evident that many of those on the list had no intention of carrying on with training. The enrolment has been decreasing throughout the year for various reasons, until it now stands at 38 active members, an increase of 5 over last year. The present enrolment is broken down into 3 fourth year members who will receive their commission after graduation, 9 third year members, 11 second year members and 15 first year members. Of 10 second year members who came before an Officer's Selection Board in February 1948, 7 passed, and were rated as Officer Candidates.

Twenty three-hour parades were held throughout the year. Instruction and equipment was supplied by permanent Force and Reserve personnel at H.M.C.S. Nonsuch. The only activity other than these regular parades in which the Unit participated was the November 11th parade. The Unit was inspected on February 2nd by Cdr. C. H. Little, R.C.N.(R), Staff Officer, U.N.T.D., from Naval Service Headquarters.

At the time of writing plans for summer training of two weeks' duration, and voluntary service of about four months' duration are underway. This training will be carried out at the West Coast where all members of the Unit will be

taken on a cruise of two weeks' duration sometime during the summer months. Officer candidates must spend one full summer training at the Coast. For these people Navigation courses of three weeks' duration, Seamanship courses of two weeks' duration, Engineering courses of four weeks' duration, Supply and Secretariat courses of six weeks' duration, Divisional courses of two weeks' duration, and Electrical Communications, Physical and Recreational Training courses are being arranged.

### **Report of the Radio Secretary, Miss Margery W. MacKenzie**

In October 1947 Radio Service moved to its new quarters in Hut H. The new accommodation includes two studios, control room, record library, practice room, and office. Since the University's broadcasting equipment has continued to be required by CKUA, broadcasting from the campus has been limited to about 35 programs, broadcast from the new studios, Convocation Hall or the Drill Hall by means of the portable remote-broadcasting equipment owned by the University.

As a convenience to speakers the recently-purchased recording machine has been used to a considerable extent. Some 110 programs have been transcribed by the Radio Secretary in the course of the year at times convenient to speakers, and broadcast later at the regular program time.

On November 21 CKUA celebrated its Twentieth Anniversary. In that connection a short anniversary program was broadcast from the new studios on the campus. The program was presented as the first part of the Music Hour, a University program which CKUA has carried throughout the whole period of its history, and it followed as closely as possible the form of the first broadcast from the University twenty years ago. Mr. H. P. Brown resumed for that program the role of announcer, the President of the University gave a brief outline of the history of CKUA, and Mrs. Robert Newton, guest pianist on the occasion of the station's opening, together with Mrs. James Walker, soloist, presented a musical program.

The University has continued to utilize approximately 3 hours, 5 days a week, of broadcasting time over CKUA. The times have been from one until two in the afternoon, and two hours in the early evening.

#### *Music Programs*

The Music Lovers' Corner, from 1 to 2 in the afternoon, and the Music Hour, from 7 to 8 in the evening, have continued to be devoted to the playing of good music. As part of the Music Hour 12 fifteen-minute organ recitals from Convocation Hall have been given by Professor J. Reymes-King.

In addition to the above-mentioned music programs, a fifteen-minute program each week has been devoted to music illustration of the Examination Syllabus of the Western Board of Music.

#### *Faculty Programs*

Ten programs convened by faculty members of the University have been presented throughout the University term. All were fifteen-minute programs, and with the exception of the Alberta Farm and Home Forum, broadcast three times a week, and the Chimney Corner, broadcast twice a week, they were weekly programs.

*Alberta Farm and Home Forum*—Convener: E. B. Swindlehurst (Prov. Dept. of Agric.) 150 programs (approximately).

This series, presented jointly by the Provincial Department of Agriculture and the University of Alberta is broadcast three times a week, throughout the entire year over CKUA in Edmonton and CJCJ in Calgary.

*Behind the Headlines*—Convener: C. S. Burchill. 24 programs.

Members of the University Faculty as well as outstanding speakers visiting the city contributed talks to this series of programs dealing with world affairs.

*Books at Random*—Convener: M. Sherlock. 22 programs.

In this series, members of the staffs of the several University libraries discussed numerous books of interest, all obtainable at the Extension Library of the University.

*The Chimney Corner*—Convener: F. M. Salter. 43 programs.

This has been a program of selected readings from the field of good literature. The reading of *Romeo and Juliet* on successive programs, and a monthly reading of selections from children's literature have been special features of this year's series.

*Curtain Going Up*—Convener: M. W. MacKenzie. 23 programs.

This program features many recordings of Shakesperian plays performed by famous actors. Towards the end of the year several plays were enacted by members of the Radio club of Strathcona High School.

*Faculty of Education*—Convener: J. W. Gilles. 19 programs.

These talks and panel discussions dealing with many aspects of the teacher training program and the educational conditions throughout the province, were given by members of the staff and by advanced students in the Faculty of Education.

*Why Stop Learning?*—Convener: A. S. R. Tweedie. 24 programs.

Members of the staff of the Department of Extension outlined in weekly broadcasts the opportunities and the assistance provided by the Department for the furtherance of various forms of adult education in the province.

*Wonder Box*—Convener: Z. J. Oliver. 16 programs.

Presented for this first time this year by students of the Faculty of Education, this was a program of dramatizations for children of stories from different lands.

*World of Science*—Convener: D. B. Scott. 18 programs.

Questions submitted by listeners furnished the basis for many of these discussions of scientific matters presented by staff members of the various science departments of the University.

*Your Home and You*—Convener: M. Patrick. 21 programs.

Dealing with many problems of the home-maker, this program of the Department of Household Economics provided women throughout Northern Alberta with valuable information.



### *Student Programs*

Greater interest in radio on the part of the students has resulted during the past year in the presentation by the Radio Society of the Students' Union of two regular weekly broadcasts as well as a number of special broadcasts.

Varsity Sports News and Campus Report were prepared and presented each week by members of the Radio Society. Special broadcasts included four programs in a Students' Artists series, one CBC broadcast in connection with the students' radio organization of Western Canadian universities, and the broadcast of a number of games from the Drill Hall.

Several plays were presented by various student groups in competition for the plaque awarded annually by CKUA. For the third successive year the award went to the Education Undergraduate Society.

### **Report of the Director of the Summer Session, Dr. H. E. Smith**

It appears to be generally agreed by instructors and students alike that this has been one of our most successful summer sessions to date. This success was no doubt due to the following factors: (1) The Summer Session Announcement was available for distribution on or about the first of February, a date considerably in advance of that achieved in previous years; (2) Syllabusses were all in order and the book supply was better than it had been for many years; (3) Our instructional staff was of a uniformly high calibre and a generous spirit of harmony prevailed throughout the whole term.

I think it may fairly be said that the students are beginning to realize that the summer courses are all at the university level, with the result that the work has been taken seriously and carried forward effectively.

The affairs of the students were conducted, I believe, very efficiently and I am sure the student body was very adequately served. The general student assembly agreed to pay a proportionate share of the salary of the permanent student secretary and accountant, and changes in the constitution were approved to this effect.

Similarly, the students endorsed the building plans of the winter session Student Council and approved a further change in the constitution to make possible a levy of a summer session fee to be credited to the Students' Union Fund.

The Daily News Sheet or Bulletin was produced this year in the office of the Students' Union, and the Council bore half the expense. It was agreed that the Summer Session should assume responsibility for half the cost of materials used, since the sheet is used for official notices as required.

### *Public Addresses*

Two public addresses were arranged during the summer period. On July 11, Dr. Aileen Dunham spoke on the topic "Reflections on the Aftermath of World War II," and on July 31 Dr. John Robert Moore spoke on "The Fun of Research." Both lectures were well attended, and apparently very much appreciated, by good-sized audiences.

A number of the classes desired to make some exhibition of their work towards the end of the session. The dramatics classes presented Euripides' "The Trojan

Women" on four successive evenings, July 7, 8, 9 and 10. Professor Eaton and his staff presented a musical concert on Friday evening, August 8, which was enjoyed by a large and enthusiastic audience. Miss Stadelbauer, Instructor in Art (Education 132) and Mr. Irwin in Arts and Crafts (Education 152) both had exhibitions of their students' work. One morning the kindergarten instructors invited the parents of the children in the demonstration class to visit the classrooms and see how the work was carried on. In the afternoon, a small party was arranged to which were invited a number of government officials and other local people who were interested in the development of the kindergarten. The Department of Household Economics, and especially the class in clothing design and construction, arranged a fashion parade in Pembina Hall on Friday evening at seven o'clock to exhibit the products of the term's work.

### *Visiting Instructors*

This year we were fortunate in having a number of outstanding visiting instructors. Without exception, I think, they proved to be happy choices. Particularly I should like to mention Dr. Allen Dunham, who is on the campus for a second time and has delighted her class again with the range of her knowledge and vivacity of presentation. Dr. Stuart H. Tompkins offered a course in Russian History, Doctors Moore and McCourt offered courses in English, and Dr. Shortliffe a course in French. Miss Vivian White, for a second summer, offered a course in dress design and was evidently highly popular with her students.

In Education, Dr. Wheat from West Virginia, Dr. Bloom from Yuba College, California, Mr. Russell West, Asst. Supt. of Schools, Ann Arbor, Michigan, Miss Edna McCallum of the London School System, Dr. Gordon Turner of the University of Western Ontario, Dr. Evelyn Mudge of Western Maryland College, offered courses that from all reports were greatly enjoyed.

The Kindergarten classes were highly successful and were obviously very much appreciated by a class of approximately thirty students. Miss Baggs and Miss Dickson, of the Toronto City schools, were instantly popular and carried two willing classes through a session of heavy work. A demonstration class of about twenty-five kindergarten children provided opportunity for the immediate application of teaching principles and procedures.

A demonstration class of some twenty-five school children backward in reading was provided for Miss McCallum and Miss Newton for their courses in reading. I should like to pay a special word of tribute to Miss McCallum for the splendid piece of work she did in the interests both of her own class and of the school children requiring remedial instruction.

A note of thanks is going forward to the Minister of Education for his generosity in making available the services of several superintendents of schools and inspectors. Mr. Bryne and Mr. Oviatt are specialists in the field of Social Studies. We were especially fortunate in having the two high school inspectors, Mr. Sweet and Mr. Sullivan, for the methods courses in Social Studies and Literature.

### *Industrial Arts Courses in Calgary*

A total of 49 students were in attendance at the school in Calgary.



We were able this year to utilize the facilities of the Institute of Technology and Art. Mr. James Fowler, principal, acted as local director.

In conclusion, I should like to assure the President of the deep appreciation I have of the opportunity to serve as Director through these four years. It has been a rich and fruitful experience, not alone in administration but more especially in association with splendid people through all ranges of University service. The work is heavy throughout a good part of the year but the returns are invaluable.

## Report of the Director of the Department of Extension, Mr. Donald Cameron

### Statistical Survey

#### *Lectures*

University teaching staff .....	777	
Department of Extension staff .....	169	
	—	946
Aggregate attendance .....		66,001
Number of radio talks .....	259	

#### *Conference and Short Courses*

Refresher Course in Sanitary Inspection .....	16
University Week for Farm Young People .....	222
Refresher Course in Municipal Administration .....	60
Refresher Course in School Administration .....	70
Community Life Conference at Gooseberry Lake .....	149
Banff School of Fine Arts .....	600
Refresher Course in Pharmacy (est.) .....	100
National Film Board and University Film Conference at Banff .....	35
Extension Short Course and Library Institute:	
Edmonton .....	15
Lethbridge .....	18
	— 33
The Educational Film Workshop at Lethbridge .....	25
Refresher Course in Medicine .....	268
Two evening Dental Clinics, approx. ....	100
Short Course for the Appraisal Institute of Canada .....	118

#### *Community Art Classes:*

Black Diamond .....	24
Lethbridge .....	32
Medicine Hat, Winter course .....	31
Summer course .....	20
Vegreville .....	21
Wetaskiwin .....	11
Edmonton:	
Afternoon class .....	8
Evening class .....	14
Evening class .....	13
	— 174

<b>Community Drama classes:</b>		
Red Deer .....	25	
Stettler .....	20	
	<hr/>	45
Aggregate attendance .....		2,015
<i>Visual Instruction</i>		
Number of times lanterns loaned .....	38	
Filmslide and miniature projectors loaned .....	28	
Sets of lantern slides sent out .....	334	
Sets of miniature slides sent out .....	267	
Number of times slides used .....	918	
Aggregate attendance lantern lectures .....		38,041
Filmslides sent out .....	2,223	
Number of times filmslides used .....	2,990	
Aggregate attendance, filmslides .....		95,223
Sets of moving picture films sent out .....	3,514	
Number of reels in sets sent out .....	13,793	
Number of showings given .....	5,055	
Aggregate attendance, moving pictures .....	433,809	
Circulating Film Exchange .....	152,380	
	<hr/>	586,189
<i>Library and Debating Service</i>		
Number of travelling libraries in use .....	90	
Number of times sent out .....	198	
Recorded circulation .....		7,822
Number of special libraries sent out .....	96	
(circulation included in Open Shelf)		
Open Shelf Circulation:		
Books (including special libraries) .....	44,326	
Banff School circulation .....	3,600	
Plays .....	2,429	
Periodicals and pamphlets .....	3,692	
	<hr/>	54,047
<i>Study Group Material</i>		
Number of sets of Citizens Forum Bulletins sent out (weekly) .....	110	
Number of sets of other study group material sent out .....	35	
	<hr/>	145
<i>New Canadian Plays</i>		
Number of copies of New Canadian plays sold .....		500
<i>Publications</i>		
Press Bulletin (Seasonal Crops) .....	10,000	
(Feeders' Day Programme) .....	5,000	
	<hr/>	15,000
Bulletins sent out during the year .....	13,523	
Mimeographed circulars and other bulletins .....	1,000	
	<hr/>	14,523

Total number of bulletins distributed since inception of service .....	524,900
University News Letter:	
Number of issues .....	8
Circulation 8x350 .....	2,800
Stage Door:	
Number of issues .....	4
Circulation 4x500 .....	2,000
The New Trail .....	9,900

#### *Recapitulation*

Total aggregate attendance at lectures, conferences and short courses, lantern slide lectures, film slide programmes, moving pictures, Circulation Film Exchanges .....	787,469
Total circulation of travelling libraries, books, pamphlets, periodicals, plays, sets of study group material, New Canadian plays .....	62,514
Total circulation of Press Bulletins, Agricultural publications, News Letter, Stage Door, New Trail .....	44,223

### **Conclusion**

This report\* marks the end of the 35th year of University extension activity. It has been a year which has taxed the University's resources to the full, but it has also been a year of substantial achievement. The heavy increases recorded in almost every phase of extension activity is an indication of the recognition by the people of Alberta that the University is an important source of information, leadership and guidance. This is as it should be. In a time when ethical and moral values are being debased everywhere, and when language is being distorted and perverted in the interests of conflicting ideologies and beliefs, the place of adult education in the community becomes more important than ever. In such a time the University has a duty and a responsibility to use every opportunity for bringing truth and understanding to every field of the constituency it serves. If the University through its adult educational activities can contribute to the establishment of a proper sense of values in the community, its efforts will have been well repaid.

### **Report of the Director of the Provincial Laboratory of Public Health, Dr. R. M. Shaw**

On authority granted by the Board of Governors, our chief serological technician, Mrs. Jean Maddison, was despatched to take special instruction in the serology of syphilis under Dr. Reuben L. Kahn at the University of Michigan Hospital, Ann Arbor, Michigan. Two months were spent with Dr. Kahn and short periods of observation were also taken at the Provincial Laboratory of Ontario in Toronto and the Laboratory of Hygiene, Ottawa. This course of study has been very valuable to us in ensuring that our serological tests will better conform

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\*The complete Annual Report on Extension Activities of the University of Alberta for the year ending March 31st, 1948, which includes a report on the 1947 session of the Banff School of Fine Arts, is available in printed form.

to the rules of performance and reading as laid down by the authors of the tests in use.

During 1947 a Dominion Order-in-Council was passed appointing the Directors of Provincial Laboratories of Health of the nine provinces members of a committee for purposes of advising the Minister of Health on laboratory methods and related subjects.

A meeting of the committee was held in Ottawa December 11-13, 1947, under the chairmanship of the Acting Director of the Laboratory of Hygiene. The members were addressed by the Hon. Paul Martin, Minister of Health, and Dr. G. D. W. Cameron, Deputy Minister. Discussion concerned methods of examination and reporting results of tests to physicians, hospitals, etc. Considerable advance has been made also in co-ordinating the efforts of the Laboratory of Hygiene with those of the Provincial Laboratories. The Laboratory of Hygiene has given very valuable assistance to the Provincial Laboratories in supplying antigens and sera for tests and in acting as distributing centre for information and certain supplies.

The meeting herein mentioned is the third in which the Directors of Provincial Laboratories have met in Ottawa on the invitation of the Dominion Department of Health and Welfare but it is the first under the Order-in-Council.

During the year the Provincial Laboratory submitted to a Dominion-wide survey of technique and efficiency in serological tests for syphilis. Bloods were collected by the Laboratory of Hygiene in Ottawa and distributed to the nine Provincial Laboratories. Drs. Reuben L. Kahn and John Kolmer, the authors of the respective tests, acted as referees in these tests.

This was the third survey of this kind undertaken within the past four or five years. Its intention is to bring about uniformity of test and improvement in efficiency and accuracy. The results were very favourable and improvement in the rating over those of previous years is gratifying.

Table XVI gives a complete picture of the amount of work carried out during the year. Total number of specimens examined amounted to 160,772 as compared to 176,417 for the year 1946, a drop of 15,645 or 8.87%. The decrease took place mainly in the number of specimens examined for syphilis and gonorrhoea, viz., 24,853 and 2,830 respectively. Increases however occurred in those tests requiring more manipulation and other labour, viz., bacteriological cultures of public health and clinical importance, notably for diphtheria, typhoid fever, tuberculosis, etc., and histopathological examination and autopsies.

There was a marked increase in the demand for animal inoculation and culture for evidence of tuberculous infection.

Rh testing was carried on for a part of the year, but when the Red Cross Blood Transfusion Service became established in Edmonton the need for this service by the Provincial Laboratory ceased and such tests were discontinued.

The testing of sensitivity to antibiotics of bacteria isolated from persons under medical care has continued.

The construction work presently being carried on in the east wing of the Medical Building has hampered considerably the office and technical staffs in their daily tasks. In spite of difficulties and distractions, all members of the staff have cheerfully and efficiently carried on their respective tasks.

**Table XVI—Work Performed in the Provincial Laboratory  
During the Year 1947**

	Total 1946	Total 1947	Increase	Decrease
Sputum Examinations .....	768	680		88
Diphtheria and Haemolytic Streptococci .....	1,788	3,278	1,490	
Typhoid Fever (Agglutination test) .....	881	1,433	552	
Milk .....	912	1,146	234	
Water .....	3,188	4,038	850	
Guinea pig inoculations .....	911	1,377	466	
Miscellaneous .....	5,685	7,040	1,355	
Plasma cultures .....	150			150
Blood cultures .....		701	701	
Enterobacteria and Intestinal Parasites .....		915	915	
Urinalysis .....	34	19		15
Medico-legal (Blood, seminal, etc.) .....	9	8		1
Cerebro-spinal fluids for the Wasserman test .....	3,097	2,849		248
Bloods for the Quantitative Kahn test .....	1,556	2,741	1,185	
Bloods for the Wasserman test .....	9,221	9,256	35	
Bloods for the Standard Kahn test .....	8,697	8,810	113	
Bloods for the Presumptive Kahn test .....	99,009	74,156		24,853
Smears for Gonococcus .....	17,577	15,482		2,095
Cultures for Gonococcus .....	5,289	4,554		735
Van Den Bergh determinations .....	288	269		19
Bloods for Rh factor .....	622	3,078	2,456	
Pathological Histological material .....	9,321	10,761	1,440	
Blood Smear examinations .....	154	175	21	
Post Mortem examinations .....	280	310	30	
Ascheim Zondek tests .....	383	472	89	
Comparative Series .....	41	38		3
Cerebro-spinal fluid examinations (Colloidal gold, pandy) .....	3,284	3,024		260
Bacteriological examinations (P.M.) .....	89	111	22	
B. abortus examinations (Agglutination test) .....	881	1,433	552	
B. tularensis (Agglutination test) .....	881	1,433	552	
Cattle Blood (Bang's disease agglutination test .....	1,421	1,185		236
<b>Total .....</b>	<b>176,417</b>	<b>160,722</b>		

**Report of the Director of the Provincial Industrial Laboratory,  
Mr. J. A. Kelso**

During the year the Laboratory carried out 5,871 examinations and analyses, an increase of 795 over the previous year. Table XVII gives some indication of the variety of work.

**Table XVII—Materials Most Frequently Examined or Analysed**

	No. of Analyses or Examinations
Antifreeze .....	50
Blood, human .....	45
Brains, for alcohol .....	31
Coal .....	89
Egg melange .....	205
Feed, animal .....	56
Feed, poultry .....	72
Industrial chemicals .....	36
Liquor .....	493
Liver, for poison .....	25
Milk .....	85
Narcotic drug exhibits .....	115
Oil, lubricating .....	28
Ore .....	178
Poison exhibits, misc. ....	43
Rock .....	83
Sterilizing solutions .....	39
Stomach, human .....	70
Stomach, animal .....	68
Urine .....	30
Water .....	1036
Wheat .....	102
Electricians' gloves .....	109
Concrete cylinders .....	1960

Engineering materials are handled in conjunction with the Department of Civil and Electrical Engineering, this arrangement working in a very satisfactory manner. We have close co-operation with all University departments, particularly, Engineering and the Oil and Gasoline Testing Laboratory and the coal division of the Research Council.

Usual investigations were carried out for various Government departments—Attorney General, Provincial Secretary, Lands and Mines, Agriculture, Health, Public Works, etc., and for the Director of Veterinary Services and the Alberta Liquor Control Board, the latter requiring inspecting and checking on all breweries in Alberta, such being in direct control of the Provincial Analyst.

The usual court evidence was given and examinations made in cases coming under the Canadian Criminal Code and various Provincial and Dominion acts and regulations, such as Alberta Liquor Control Act, Excise Act, Opium and Narcotic Drug Act, etc.

Co-operation has been given to the Department of National Health and Welfare, who are carrying on investigations with the Department of Health and the Workmen's Compensation Board.

All required analyses and investigations were made for R.C.M.P. and other police officers and for Provincial Coroners, and the necessary reports prepared and evidence given by Provincial Analyst at inquests, etc.







REPORT

OF

THE GOVERNORS

OF THE

UNIVERSITY OF ALBERTA

1948-49

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*To the Lieutenant Governor in Council*

SIR:

On behalf of the Governors of the University of Alberta, and in accordance with Section 28 of an Act respecting the University of Alberta, the undersigned have the honour to transmit through the Minister of Education the Report of the University of Alberta, setting forth the revenues and expenditures for the year ending March 31st, 1949, and the investments as they stood at the end of the fiscal year.

Appended to this report is the Report of the President of the University, in which the academic work of the University for the year, July 1st, 1948, to June 30th, 1949, is dealt with in detail.

H. H. PARLEE, *Chairman*

ROBERT NEWTON, *President*

November 30th, 1949



# Financial Statements

STATEMENT A

## UNIVERSITY OF ALBERTA

### BALANCE SHEET AS AT MARCH 31, 1949

#### ASSETS

##### FIXED:

Buildings and equipment in service:		
Land, buildings and plant, Schedule No. 1.....	\$6,762,099.22	
Furnishings and equipment, Schedule No. 2 .....	1,611,435.23	
		\$8,373,534.45

##### LOANS RECEIVABLE:

Students' Union re Students' Union Building, see contra .....		62,460.00
---	--	-----------

##### CURRENT:

Cash on hand and in treasury branch .....	\$ 22,978.91	
Accounts receivable:		
Sundry debtors .....	\$ 45,509.70	
Less: Reserve for doubtful accounts..	2,500.00	
	\$ 43,009.70	
Government of the Province of Alberta re construction of buildings .....	511,405.27	
		554,414.97
Accrued interest .....		4,241.67
Merchandise held for resale, Schedule No. 4 .....		84,622.04
Dominion of Canada bonds .....		10,000.00
		676,257.59

##### PREPAID EXPENSES:

Supplies on hand, Schedule No. 4 .....	\$ 51,345.84	
Unexpired insurance .....	2,396.54	
Legal retainer fee .....	375.00	
Unemployment insurance stamps .....	9.66	
		54,127.04

##### OTHER ASSETS:

Livestock inventory .....	\$ 24,957.00	
Deposit, Workmen's Compensation Board .....	8,564.00	
		33,521.00

##### TRUST:

	Par Value	Book Value
Investments, Schedule No. 5:		
Dominion of Canada bonds .....	\$ 568,500.00	\$ 572,848.28
Province of Alberta debentures .....	685,600.00	685,757.85
Province of Alberta special adjustment coupons .....	28,775.94	27,593.44
Preferred shares .....	500.00	500.00
	\$1,283,375.94	\$1,286,699.57
Cash on hand and in bank .....		338,235.43
Due from general account .....		68,000.00
Loans receivable .....		53,881.90
Debenture interest receivable, deferred .....		49,583.50
Mortgages, receivable .....		2,055.90
Real estate, shares and sundry, nominal value .....		11.00
		1,798,467.30
		\$10,998,367.38



# LIABILITIES

## CAPITAL AND SURPLUS:

Capital provided by the Government of the Province of Alberta .....	\$7,328,231.00	
Capital surplus .....	1,141,199.93	
		\$8,469,430.93

## LOAN PAYABLE:

Government of the Province of Alberta re Students' Union building, see contra .....		62,460.00
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## CURRENT:

Imperial Bank of Canada overdraft .....	\$ 134,314.09	
Imperial Bank of Canada loan .....	9,000.00	
Cafeteria tickets outstanding .....	1,617.30	
Accounts payable .....	182,935.05	
Due to trust account .....	68,000.00	
		395,866.44

## DEFERRED INCOME:

Fees .....	\$ 11,202.00	
Other .....	2,018.19	
		13,220.19

## RESERVES:

Unexpended library fees .....	\$ 30,528.38	
Plant science field laboratory .....	25,000.00	
Premium on Rockefeller endowment .....	18,221.66	
Extraordinary maintenance and repairs .....	16,000.00	
Workmen's Compensation Board .....	13,185.75	
Blood plasma unit .....	10,000.00	
Rink repairs .....	9,896.28	
Dining room repairs and replacements .....	9,146.89	
Insurance appraisal fees .....	8,000.00	
Unexpended University Athletic Board fees .....	7,822.96	
Operating .....	111,120.60	
		258,922.52

## TRUST:

General endowment Rockefeller Foundation .....	\$ 500,000.00	
Scholarships:		
Escheated estates .....	\$288,852.98	
General .....	201,438.26	
		490,291.24
Research .....		284,321.06
General educational purposes .....		159,525.76
Student grants and loans .....		82,053.66
Staff building loan fund .....		50,000.00
Pensions .....		42,200.04
Sundry:		
Administered by the University .....	\$ 87,370.80	
Held on behalf of others .....	102,704.74	
		190,075.54
		1,798,467.30
		\$10,998,367.38

Edmonton, Alberta, August 12, 1949

I have audited the books and records of the University of Alberta for the year ended March 31, 1949.

### Operating Results

Operations for the year under review resulted in a surplus of \$196,005.57 after providing from current revenues for expenditure on new buildings and equipment. Details of operations are shown on Statement B and accompanying schedules.

Appropriations from operating reserve, Statement C, have been made under the authority of the Executive Committee and are subject to ratification by the Board of Governors.

Maintenance and upkeep of buildings used by the Edmonton and Calgary normal schools has been provided by the Province direct.

### Financial Position

Buildings, plant, furnishings and equipment are stated on the Balance Sheet at original cost. No provision has been made for depreciation, but University officials are of the opinion that the value of furnishings and equipment has been maintained by additions and renewals from revenue and reserve accounts.

In order to finance a Students' Union building the Province of Alberta has agreed to make advances to the University of Alberta. Repayments are to be made by the University from annual instalments received from the Students' Union. The loan receivable shown on the Balance Sheet in the amount of \$62,460.00 represents the Province's advances to March 31, 1949. No formal agreements in respect of this transaction have been completed at this date.

Inventories of merchandise for resale and supplies on hand are certified as to quantities and prices by officials of the University.

Past due principal on mortgages receivable amounted to \$2,055.90 as at the date of the Balance Sheet.

Capital and surplus transactions during the year are summarized hereunder:

Capital provided by the Government of the

Province of Alberta:

Balance as at April 1, 1948 .....	\$6,017,802.43	
Add:		
Library construction .....	562,530.23	
Medical building additions .....	323,114.35	
Other buildings and improvements .....	278,844.16	
Equipment .....	111,255.86	
Paving .....	31,683.97	
Implementation of guarantee .....	3,000.00	
		\$7,328,231.00

Capital surplus:

Balance as at April 1, 1948 .....	\$ 997,978.51	
Add:		
Students' Union building transferred .....	62,460.00	
Buildings and equipment acquired from donated funds .....	33,311.03	
Income contributions:		
Library .....	27,027.31	
Buildings and equipment .....	20,423.08	
		1,141,199.93
		<u>\$8,469,430.93</u>

Subject to the foregoing remarks, I certify that, in my opinion, the above Balance Sheet is properly drawn up so as to show the true financial position of the University of Alberta as at March 31, 1949, according to information and explanations given to me and as shown by the books of the University, and the accompanying Statement of Revenue and Expenditure correctly sets forth the result of operations for the year ended at that date.

C. K. HUCKVALE, C.A.  
Provincial Auditor

UNIVERSITY OF ALBERTA  
STATEMENT OF REVENUE AND EXPENDITURE  
FOR THE YEAR ENDED MARCH 31, 1949

## REVENUE

## Grants:

## Province of Alberta:

General .....	\$1,170,900.00
Debt charges, see contra .....	231,645.38
	<hr/>
	\$1,402,545.38

## Dominion of Canada:

Department of Veterans' Affairs, supplementary grant re rehabilitation students .....	243,655.78
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\$1,646,201.16

## Fees:

Tuition, Schedule No. 7 .....	\$ 715,807.35
Examination and special, net, Schedule No. 8 .....	5,231.64

721,038.99

Interest on Rockefeller Foundation endowment .....	\$ 17,500.00
Deduct: Transferred to medical research trust .....	5,000.00

12,500.00

Library fees, see contra .....

22,634.13

University Athletic Board fees, see contra .....

20,065.65

Operating departments net revenue, Schedule No. 9.....

22,144.19

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\$2,444,584.12

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## EXPENDITURE

## Instructional expense:

Instructional salaries and direct expenses, net, Schedule No. 10 .....	\$1,356,977.82
Maintenance of buildings, Schedule No. 11 .....	204,577.01
Administrative salaries and expenses, Schedule No. 12 .....	84,543.16
Library salaries and expenses, Schedule No. 13 .....	61,801.05
Upkeep of grounds, Schedule No. 14 .....	30,913.61
Provision for library accessions, see contra .....	22,634.13
Provision for University Athletic Board expenses, see contra .....	20,065.65
Calendars, scientific and other publications, Schedule No. 15 .....	10,966.59
Pension arrears, Schedule No. 16 .....	7,802.01
Alumni office, Schedule No. 17 .....	5,381.01
Provost's office, Schedule No. 18 .....	5,199.76
Veteran counselling, Schedule No. 19 .....	923.40
Sundry, Schedule No. 20 .....	3,577.32

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\$1,815,362.52

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Public service departments net expenditure, Schedule No. 21 .....

181,147.57

Debt charges, see contra .....

231,645.38

Buildings and equipment purchased from income, Schedule No. 6 .....

20,423.08

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\$2,248,578.55

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Surplus for the year ended March 31, 1949, transferred to operating reserve .....

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\$ 196,005.57

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UNIVERSITY OF ALBERTA  
STATEMENT OF OPERATING RESERVE  
FOR THE YEAR ENDED MARCH 31, 1949

STATEMENT C

Balance as at April 1, 1948 .....		\$ 29,783.40
Deduct:		
Adjustments of previous years' transactions, net ....		753.95
		<u>\$ 29,029.45</u>
Add:		
Surplus for the year ended March 31, 1949 .....	\$ 196,005.57	
Preliminary building expense reserve, architects' fees unexpended .....	3,085.58	
		<u>199,091.15</u>
		<u>\$ 228,120.60</u>
Deduct:		
Transfers to trust account:		
Staff building loan fund .....	\$ 50,000.00	
Fund for purchase of Rutherford Library of Canadiana .....	12,000.00	
Banff School of Fine Arts chalets .....	6,000.00	
Reserve provisions:		
Plant science field laboratory .....	25,000.00	
Extraordinary maintenance and repairs .....	16,000.00	
Insurance appraisal fees .....	8,000.00	
		<u>117,000.00</u>
Balance as at March 31, 1949 .....		<u><u>\$ 111,120.60</u></u>

*To the Governors of the  
University of Alberta*

GENTLEMEN:

I have the honour to submit the following report on the work of the University of Alberta for the year ending June 30th, 1949.

ROBERT NEWTON  
*President*

# *The Report of the President*

*As presented to Convocation, October 23, 1948*

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Since my last report to Convocation in May of this year, the most important happenings around the University concern the summer session, the summer activities of the staff, and the registration of students for the regular session of 1948-49.

The summer session was attended by 1405 students at Edmonton, 42 at Calgary, and 607 at Banff. At Edmonton and Calgary, over 90% of these were school teachers who returned to continue their studies in the Faculty of Education. The summer session has become a very important factor in our teacher-training programme. While the majority of students in Education are still forced by economic considerations to begin the practice of teaching before they attain the degree of Bachelor of Education, more and more of these are returning to complete their degree work by the summer session route. This is very encouraging, and strengthens our faith that the system of teacher education pioneered by this province is sound and right.

The Banff School of Fine Arts has a magnificent home setting, yet has always been to a limited extent decentralized, in that parties of students made short excursions to Canmore, Sunshine Lodge, Lake Louise, the Columbia Icefields, and Jasper, in order to utilize more fully the artistic resources of the mountain parks in Alberta. This year students who had to be refused admission to the painting classes at Banff for lack of accommodation were given the option of going to Jasper for the entire session. Nineteen availed themselves of this opportunity, and they were reinforced from time to time by short-term visitors from Banff, bringing the number under instruction at Jasper more nearly to fifty at any given time. This year's students at Banff came from all the provinces except Prince Edward Island (that gap was compensated by a student from our prospective tenth province), from twenty American states, from England, Australia, New Zealand, and Hawaii—a truly international institution, but still dominantly Albertan.

I am happy to announce a gift of \$122,800, by Mrs. J. H. Woods, of Calgary, to build for the Banff School two large chalets as a memorial to her husband. These will greatly improve our accommodation there.

Prominent among the summer activities of staff members are, of course, those of the Department of Extension. Eleven short courses and five community life conferences were held during this period. The short courses included such diverse subjects as sanitary inspection, recreational leadership, vocational guidance, school and municipal administration, and community art.

But while the public is willing to take it for granted that members of the Department of Extension work all the year round, it sometimes assumes that members of teaching departments have nothing further to do after classes close in the spring until they reopen in the fall. Nothing could be further from the truth.

It will already be apparent from the size of the summer session that many members of the staff are busy with this important and highly concentrated activity.



But that is by no means all. Generally speaking, the members of the staff spend the summer in research, or in reading and study (either to bring themselves up to date in their subjects or to secure credit towards an advanced degree) or in visits to other institutions on this continent and in Europe, a necessary refreshment and stimulation to persons devoted to intellectual pursuits. Special summer activities of one kind or another are of course very common. I shall give here examples for this summer taken from four departments:

The director of the School of Pharmacy gave eight lectures to the B.C. Pharmaceutical Association Summer School in June, gave the commencement address at the Kamloops High School, lectured in the Alberta Pharmaceutical Association refresher course at Edmonton, also at the Saskatchewan Pharmaceutical Convention at Waskesiu, spent a month with his colleagues checking their research findings on the Canadian formulary and reported these to the Canadian Formulary Revision Committee at Toronto in August, presented another paper to the Canadian Conference of Pharmaceutical Faculties in Windsor a few days later, and was elected Chairman of that Conference for next year. Meanwhile the other four members of his staff, in addition to attending their share of meetings, continued research here on various projects, two of them assisted by grants from the Canadian Foundation for the Advancement of Pharmacy.

Two members of the Department of Zoology rounded off a summer's field work by accepting special invitations to the Centennial meeting of the American Association for the Advancement of Science at Washington in September, one to participate in a panel discussion on animal migration, the other to contribute to a symposium on the optimum catch in fisheries.

In the Department of Modern Languages one member completed his doctorate at Paris with high distinction, another completed the translation into French of Thomas Wolfe's book "Of Time and the River", a third completed the publication by our own University Press of two manuals for instruction in French, and a fourth did Dominion of Canada public relations work in Jasper National Park.

In the Department of Mining and Metallurgy, one member spent the summer on bituminous sand investigations, a second gave expert service to a prospecting syndicate in the Yukon, and a third overhauled the ventilating system of a section of the Flin Flon mine.

One could multiply the list, but these examples are enough to illustrate the kind of activities that keep our university staff members very busily and usefully employed whenever their teaching programme permits.

We have started the regular session of 1948-49 with a registration of 4530. This corresponds with 4941 at this time last year, a drop of 411 students. The drop was all in the freshman year, which has now 1110 as compared with 1553 last year. Probably this year's number of first-year students may be regarded as near normal for the post-war period, since it includes only a few student veterans. At that rate, allowing for further recessions during the next two years as our large senior classes graduate, our total winter-session registration seems likely to stabilize at about 3500, before starting gradually upwards again. The corresponding figure for the largest pre-war registration was less than 2000.

It is of interest to note that the Calgary branch of our Faculty of Education, which had 181 students last year (including some partial students), has this year

222. That lusty youngster continues to grow in spite of temporary recession elsewhere in the University.

Dean Hardy and I attended the British Commonwealth Universities Congress, revived after a gap of twelve years, and profited by the opportunity to meet representatives of every university in the Empire. We found all of them preoccupied with the same problems of space, finance, staff, and equipment with which we ourselves are grappling, all struggling as we are to adapt our curricula to changing conditions and make the university more truly the centre of the contemporary cultural life of our community.

The world seems to have gone awry, but hopeful signs are not lacking. I read lately an Oxford Press statement that the New York edition of Somervell's abridgement of Toynbee's "A Study of History" sold 200,000 copies in the first year, also that Toynbee's "Civilization on Trial" sold 35,000 copies the first day after publication. People are hungry for authentic information, the whole truth. They are hungry, too, for a better, less materialistic life, as witness their crowding into the Banff School of Fine Arts, and their demand for extension courses in the fine arts, which puts a heavy strain on our limited staff.

Never before in history has so great a challenge faced the universities, so great an opportunity spread before educated men and women. We count upon those who are graduating today to do their full part. They have wonderful leadership and example in the two honorary graduands who head the list today, Hon. James A. MacKinnon and Dr. A. E. Archer. These two men have not only made a success of their own business or profession but have devoted themselves unsparingly to the highest possible public service.

### **Report of the President**

*As presented to Convocation, May 17, 1949*

We are presenting for degrees and diplomas today some 1200 students, the largest graduating class in our history. Last spring we graduated about 900, the largest up to that time. The very large post-war classes, dominated by student veterans, are now moving out, the veterans having been officially "rehabilitated". This year we had 4605 full-session students, a few hundred less than last year. From the teaching point of view, however, this was our peak year, because the large numbers were in the senior years. Next year will also be quite heavy for the same reason.

Last year we had in the regular session almost equal numbers of student veterans and civilians, namely, 2453 and 2412. This year we had 1977 veterans and 2628 civilians. In the 1948 summer session there were 1405 students at Edmonton, 42 at Calgary, and 608 at Banff. Our grand total for the year was 6687 as compared with 6822 last year, or a decrease of 135.

Admission quotas of about fifty students in each of first-year Medicine and first-year Pharmacy have had to be maintained. In Dentistry it appears that we have overtaken the backlog, and that the normal quota of about thirty-five first-year students will accommodate all the qualified candidates next fall.

It is gratifying to report that the need for teachers in secondary schools has been almost fully met by graduates of our Faculty of Education. There is still a substantial shortage of teachers for the elementary grades, mainly in rural schools. A

special committee of the Faculty is studying the program of training for elementary school teachers, with a view to making this more adequate and attractive.

The Calgary branch of the Faculty of Education continues to flourish. The Director reports an attendance of 222 students, an increase of 42 over last year. Five new members were appointed to his staff, three of them in the Faculty of Arts and Science. The addition this year of new science laboratories and lecture rooms in a remodelled Air Force building completed all necessary facilities for teaching the first two years of the B.Ed. course. The cordial co-operation of the Institute of Technology and Art enables students studying for the B.Ed. in Industrial Arts to complete the third year of that course at Calgary.

As the province of Alberta matures, the complexion of its population gradually changes, and this is reflected in our university students. Here is an interesting little table showing the numbers and percentages of Alberta-born students in the University at ten-year intervals after the First Great War:

	Total Registration	Alberta-born No.	%
1918-19 .....	339	32	9.4
1928-29 .....	1,516	555	36.6
1938-39 .....	2,175	1,185	54.5
1948-49* .....	4,605	3,418	74.2

\*Regular winter session only.

Perhaps the most important single event during the year was the presentation to the University Senate and the General Faculty Council of a report on General Education. This was prepared at the request of the Senate by a special committee which studied the question for several months, under the chairmanship of Professor Andrew Stewart. Universities all over the world have become increasingly concerned over the tendency of the professional faculties to dominate by sheer weight of numbers, with the attendant danger that the educational purpose of the universities might be submerged by undue emphasis on technical training. A university is not content to turn out skilful practitioners who are not also well educated citizens. There is no easy solution to this problem, since professional training is very necessary, and often so heavy and exacting as to leave little room for general education. The subject has been under discussion for many years, but the Stewart Committee report contained such a careful analysis both of the difficulties and of possible solutions as to stir up unusual interest and considerable action by faculty councils.

The accommodation of a number of departments has been improved this year by the completion of the east and west wings of the Medical Building. The new Dental Clinic was opened last fall with appropriate ceremony, and is regarded as the finest in the country. The School of Pharmacy is not fully settled in its new quarters, but that school also will shortly be able to claim equipment second to none. Other parts of our building programme are proceeding satisfactorily, notably the Rutherford Library and the first unit of the Students' Union building. These two should be completed in 1950 and will enormously improve our equipment, the library for scholarly work, the Union for extracurricular activities and social amenities.

With evidence of building activity all round them, faculties and schools, especially Agriculture and Engineering, which have carried on many years with very

inadequate accommodation, and the professional societies dependent on them for recruits, have grown understandably restive at the lack of obvious action to make additional provision for them. The Board of Governors regards the buildings now under construction as completing the first phase of our post-war expansion. In preparation for the second phase, a special committee has been appointed to survey this summer our probable space requirements during the next ten years. The committee has been asked to assume that our attendance, after dropping for two more years, will build up again to a level of about 5000 students by the end of the period covered by its terms of reference. What we want to develop is a building programme that will ensure proper accommodation for that number of students, divided among the various faculties in accordance with the best estimates the committee can make. We must assume that the various temporary arrangements, especially the ex-army huts, upon which we now depend for a substantial part of our accommodation, will have run their course by the end of that time.

A related study has been initiated by Professor Andrew Stewart, now Dean of Business Affairs in the University, on university finance. Growth in size means growth in cost. Professor Stewart will analyse the cost per student in different faculties, the cost per course, and the cost of enterprises other than teaching; he will tackle the difficult problem of long-range budget forecasting, and attempt to assess the shares that should reasonably be carried by government grants and by students' fees. Our purpose is to develop sound and stable financial policies.

The University continues to adjust its programme to serve the special needs of the province as well as possible. Let us take, for example, the petroleum industry, now assuming such importance in our economy. The Department of Geology has enlarged its course offerings to help students who are preparing for petroleum exploration. It is gratifying to report that Imperial Oil Limited donated a \$600 set of books to our library in recognition of the particular contribution Dr. P. S. Warren has already made in that field. The same company is making a substantial contribution to the equipment of our petroleum engineering laboratories, now the central feature of our Department of Chemical Engineering. Dr. George Govier, the youthful and vigorous chairman of that department, is also a member of the Alberta Petroleum and Natural Gas Conservation Board. Finally, on this particular subject, I should mention the latest in our ever-expanding list of short courses, a Mud School. This two-week course is in session now. Apparently mud, from the viewpoint of a well driller, is a highly important and technical subject. The well-drilling contractors, both Canadian and American, and the Conservation Board, have put their collective heads together under the wing of our Department of Extension to instruct well drillers in good practice in the use of mud as a drilling fluid.

Among other ventures initiated during the year, I should mention particularly new courses in farm management and in irrigation engineering. These meet long-recognized needs which have become more pressing as time went on.

The external services, often on a national basis, that our staff members are asked to give, are welcome evidence of the respect in which they and the University are held. Dean R. D. Sinclair has been during the past year national president of the Agricultural Institute of Canada. Dean W. S. Hamilton has been Chairman for two years of the Council on Dental Education of the Canadian Dental Association, presiding over the preparation and publication of a booklet entitled, "The



Requirements for Approval of a Dental School." Professor Andrew Stewart was a member of the Royal Commission on Natural Gas. Mr. E. J. Hanson prepared for the Provincial Department of Municipal Affairs a report on municipal administration. Dr. R. L. Rutherford was appointed a member of the newly created National Advisory Committee for Research in the Geological Sciences. Dr. W. H. Johns is a member of the Humanities Research Council, and Chairman of its Committee on Grants in aid of Research. Professor M. H. Long is a member of the Social Science Research Council, also of the Historic Sites and Monuments Board of Canada, and Chairman of the Geographical Board of Alberta. The last-named body is responsible for approving all new geographical names in this province. Dr. D. E. Smith is one of six directors of the Canadian Psychological Association. The foregoing are just examples, not a complete list.

You will find in your convocation programmes the titles of theses, based on original research, presented by post-graduate students getting their degrees today. Time fails me to describe the research work represented by scores of papers published by staff members during the year. Suffice it to say that the University is doing its full part in pushing back the bounds of knowledge as well as in conserving and imparting to students the vast body of existing knowledge.

While most of our contributions to new knowledge may have reference to scientific or other problems affecting our physical or economic well-being, I am glad to say the University is also promoting that finer quality of life for which our people are hungering. The Banff School of Fine Arts, now an institution of international reputation, has held sixteen annual summer sessions. Our Department of Fine Arts at Edmonton began its work only four years ago, but has already made its mark on the province. In addition to the regular courses for full-time students, there was this year a ten-week course in choral leadership attended by 45 students. There were eleven extension art classes on the campus, and ten community art classes in other places. There have been regular art exhibitions in the University buildings, developing the interest and taste of students in all faculties. There was established a studio theatre on the campus, giving opportunity for practical and experimental work in play production. One of the most gratifying features of all the fine arts work on the campus is the large number of Education students who participate, and who will be able to carry its benefits directly to the schools of the province. The music teachers of the provinces are depending more and more on the Western Board of Music, operating under the wing of the University, as an examining body. Over 1200 music pupils wrote the Board's examinations this year, competing for over \$4000 worth of scholarships and prizes donated by organizations and individuals in the province.

Student government in the University was maintained at a high standard under the leadership of Mr. Bernard J. Bowlen, President of the Students' Union. Mr. Bowlen was awarded the first J. D. O. Mothersill Scholarship of \$150, hereafter to be awarded annually to a student selected for outstanding contributions to student life in the University, especially through good citizenship and active support of student government.

We have no greater joy than to see our students and graduates do well, and I should like to mention three other names of graduates who have brought special honour this year to themselves and to the University.

Mr. Eoin L. Whitney, who graduated a year ago with first class honours in Mathematics and the Governor-General's gold medal, also won that year a special prize for placing in the first five competitors for the Putnam Prize Scholarship of \$1500 to Harvard University. This year he won the Putnam Scholarship itself, the most coveted mathematical prize on the continent.

Dr. Donald R. Wilson, our Rhodes Scholar of 1935 and now a member of our Faculty of Medicine, was awarded a Markle Foundation Scholarship of \$25,000, spread over five years, to enable him to devote himself to advanced teaching and research here during that period.

Miss Grace L. Duggan, graduate and member of our School of Household Economics, has been awarded a special fellowship by the Canadian Home Economics Association to devote the next year to a survey of home economics education in Canada, and to some extent in the United States, in relation to professional services expected of graduates, and to make recommendations for any desirable changes.

These persons, and others I could mention if time permitted, are pacemakers for you young men and women who are going out today. If you individually make the best contribution to your communities of which you are capable, the University will have achieved its purpose as a centre of enlightenment and a force for progress. We wish you good success and Godspeed!

\* \* \* \*

Appended to this report are tabular data concerning academic staff numbers; academic staff appointments and promotions; leave of absence, retirements, and resignations; staff recognition; student registration; gifts; new scholarships, prizes, and medals; staff publications; and excerpts from the reports of the Deans, Directors, Librarian, Provost, Chairman of the Committee on Physical Education, Radio Secretary, and Commanding Officers of Armed Services training units.

**Table I.—Academic Staff Numbers**

*Administrative Officers*

President .....	1	
Assistant to the President .....	1	
Deans of Faculties .....	7	
Directors of Schools .....	3	
Director of the Summer Session .....	1	
Director of the Calgary Branch .....	1	
Director of the Banff School of Fine Arts and the Department of Extension .....	1	
Provost .....	1	
Adviser to Women Students .....	1	
Librarian .....	1	
Superintendent of the University Hospital .....	1	
Registrar .....	1	
Assistant Registrar .....	1	
Alumni Secretary .....	1	
Bursar .....	1	
Wardens of Residence Halls .....	3	
	<hr/>	26

*Full-time Teaching Staff*

Professors .....	46	
Associate Professors .....	37	
Assistant Professors .....	67	
Lecturers .....	38	
Instructors .....	35	
	<hr/>	223



On leave of absence:		
Assistant Professors .....	2	
Lecturers .....	1	
<i>Part-time Teaching Staff</i>		
Professors .....	11	
Associate Professors .....	4	
Clinical Professors .....	13	
Assistant Professors .....	6	
Associate Clinical Professors .....	1	
Lecturers .....	29	
Instructors .....	90	
Demonstrators in the Faculty of Education .....	116	
Student demonstrators and assistants .....	210	
	—	480
On leave of absence:		
Associate Professors .....	1	
Instructors .....	1	
<i>Department of Extension</i>		
Director .....	1	
Assistant Professor .....	1	
Librarian .....	1	
Assistant in Study Groups .....	1	
Lecturer .....	1	
	—	5
<i>Library</i>		
Librarian .....	1	
Reference Librarian .....	1	
Chief Cataloguer .....	1	
Order Librarian .....	1	
Assistants .....	4	
Junior Assistants .....	2	
	—	10
<i>Industrial Laboratories</i>		
Director, Provincial Analyst .....	1	
Assistant .....	1	
	—	2
<i>Provincial Laboratory of Public Health</i>		
Director, Provincial Bacteriologist .....	1	
Pathologist, Provincial Serologist .....	1	
Assistants .....	2	
	—	4
<i>Other Academic Staff</i>		
Dietitians .....	3	
Radio Secretary .....	1	
Purchasing Agent .....	1	
Chief Accountant .....	1	
	—	6
Total .....		756
Less duplicates .....		26
<i>Total Academic Staff</i> .....		730

## Table II.—Academic Staff Appointments and Promotions

### *Faculty of Arts and Science*

- Dennis McNeice Healy, M.B.E., psc., B.A., Dip. d'Et. Sup., L-ès-L., Docteur de l'Université, from Assistant Professor to Associate Professor of Romance Languages.
- Walter Hugh Johns, B.A., Ph.D., from Assistant Professor to Associate Professor of Classics.
- Henry Bertram Mayo, M.A., D.Phil., from Assistant Professor to Associate Professor of Political Economy.
- Willard Finlay Allen, B.Sc., M.A., Ph.D., Assistant Professor of Chemistry, Calgary Branch.
- Iriny de Buisseret, L. en Droit, Assistant Professor of Modern Languages.
- Richard Stephen Eaton, Mus.B., from Lecturer to Assistant Professor of Music.
- Victor Ernest Graham, B.A., Assistant Professor of French and English, Calgary Branch.
- William Wolfgang Happ, B.Sc., S.M., Ph.D., Assistant Professor of Physics.
- John Graham Millar, M.Sc., B.A., Assistant Professor of Mathematics and Physics, Calgary Branch.
- Kenneth Bateman Newbound, M.S., Ph.D., Assistant Professor of Physics.
- Matthew Henry Scargill, B.A., Ph.D., Assistant Professor of English.
- Donald Alexander Fraser, B.A., Ph.D., Lecturer in Botany.
- John Kenneth Heath, M.C. and bar, M.A., Lecturer in English.
- Donald Spearman, M.A., Ph.D., Lecturer in Psychology.
- Charles Richard Stelck, M.Sc., Lecturer in Geology.
- Robert Stuart, Lecturer in Drama.
- Thomas Frank Wise, B.A., Lecturer in Political Economy.
- Virginia M. Lemieux, B.S., Ph.D., Sessional Lecturer in Chemistry.
- Raymond Russell Brown, B.Sc., Sessional Instructor in Chemistry.
- Leonard Herman Greenberg, B.Sc., Sessional Instructor in Physics.
- William Wyman Kerr, B.A., M.Sc., Sessional Instructor in Physics.
- Albert Hedley Manifold, B.Sc., M.S., Sessional Instructor in Geology.
- Lester Russel Melby, B.Sc., Sessional Instructor in Chemistry.
- George Samuel, M.A., Sessional Instructor in Modern Languages.
- George Peter Semeluk, B.Sc., Sessional Instructor in Chemistry.
- Severin Andreas Heiberg, B.Sc., part-time Sessional Instructor in Physics.
- Jean Evelyn MacLean, B.A., M.Ed., part-time Sessional Instructor in Music.
- Albert Thomas Thompson, B.Ed., part-time Sessional Instructor in Mathematics.

### *Faculty of Agriculture*

- Donald Robert Clandinin, M.S.A., Ph.D., from Assistant Professor to Associate Professor of Poultry Husbandry.
- Alexander Robinson Robblee, M.Sc., Ph.D., Assistant Professor of Poultry Husbandry.
- John Alfred Toogood, B.Sc., Ph.D., Assistant Professor of Soils.
- John Unrau, B.S.A., M.Sc., Ph.D., Assistant Professor of Genetics and Plant Breeding.
- James Gerard O'Donoghue, D.V.M., part-time Lecturer in Veterinary Science.
- Hugh Alexander Rigney, M.Sc., Sessional Instructor in Animal Husbandry.

Austin David Bassett, B.Sc., part-time Instructor in the Diploma Course in Dairying.

Ralph Hanson, B.Sc., part-time Instructor in the Diploma Course in Dairying.

#### *Faculty of Dentistry*

Arthur Benjamin Mason, D.D.S., Honorary Professor of Peridontia.

Sperry David Fraser, D.D.S., from Assistant Professor to Associate Professor of Prosthetic Dentistry.

Roderick Archibald McEwen, D.D.S., from Assistant Professor to Associate Professor of Prosthetic Dentistry.

William Arthur E. Quigley, L.D.S., D.D.S., M.S., from Assistant Professor to Associate Professor of Orthodontia.

George Archibald Brass, D.D.S., B.S.D., from Lecturer to Assistant Professor of Operative Dentistry.

James Douglas McLean, D.D.S., L.D.S., from Lecturer to Assistant Professor of Prosthetic Dentistry.

William Orobko, B.Sc., D.D.S., from Lecturer to Assistant Professor of Operative Dentistry.

Robert Valentine Blackmore, D.D.S., Sessional Instructor in Operative Dentistry.

Charles Gavan Duke, D.D.S., Sessional Instructor in Prosthetic Dentistry.

William Graham Hall, D.D.S., Sessional Instructor in Prosthetic Dentistry.

Winston Alexander Johnstone, D.D.S., Sessional Instructor in Prosthetic Dentistry.

Kenneth Alan McMurphy, D.D.S., Sessional Instructor in Operative Dentistry.

Harold Louis Samuels, D.D.S., Sessional Instructor in Operative Dentistry.

#### *Faculty of Education*

Earl William Buxton, B.A., B.Ed., Assistant Professor of Education, and Assistant Provost, Calgary Branch.

William Eric Hodgson, B.A., B.Ed., Assistant Professor of Education.

Harold Clarence Melsness, B.Sc., Assistant Professor of Education.

Cyril Hampson, B.A., part-time Sessional Instructor in Education.

#### *Faculty of Engineering*

George Wheeler Govier, B.A.Sc., D.Sc., from Associate Professor to Professor of Chemical Engineering.

Ewald Oscar Lilge, M.Sc., from Assistant Professor to Associate Professor of Mining and Metallurgy.

George Ford, M.Sc., Ph.D., Assistant Professor of Applied Mechanics.

Donald Baker Robinson, M.A.Sc., Assistant Professor of Chemical Engineering.

Thomas Blench, B.Sc., Special Lecturer in Civil Engineering.

David Panar, M.Sc., Lecturer in Mechanical Engineering.

John Lauriente, B.Sc., Sessional Lecturer in Chemical Engineering.

Roderick Lorne McDougall, B.Sc., Sessional Lecturer in Chemical Engineering.

Andrew Lee Scott, M.A.Sc., Sessional Lecturer in Chemical Engineering.

Gordon Frederick Coates, B.Sc., Sessional Instructor in Applied Mechanics.

Herbert Henry Dofka, B.Sc., Sessional Instructor in Electrical Engineering.

Ensley Allan Godby, B.Sc., Sessional Instructor in Electrical Engineering.

Charles Gordon Michie, B.Sc., Sessional Instructor in Electrical Engineering.

Donald Edgar Anderson MacKay, B.Eng., M.Com., Sessional Instructor in Mechanical Engineering.  
 James William MacLeod, B.Sc., Sessional Instructor in Mining Engineering.  
 Hamilton Howse Neelands, B.Sc., Sessional Instructor in Electrical Engineering.  
 Keith Provost, B.Sc., Sessional Instructor in Electrical Engineering.  
 John Anderson Randle, B.Sc., Sessional Instructor in Civil Engineering.  
 Clifford Douglas Smith, B.Sc., Sessional Instructor in Civil Engineering.  
 Earlmound Virginia Webb, B.Sc., Sessional Instructor in Civil Engineering.  
 Eldon Lloyd Fowler, B.Sc., part-time Sessional Instructor in Civil Engineering.  
 Philip John Rivard, B.Sc., part-time Sessional Instructor in Civil Engineering.

#### *Faculty of Law*

Wilbur Fee Bowker, B.A., LL.B., from Acting Dean to Dean of the Faculty of Law.  
 Leonard Cornelius Hawco, B.A., from Sessional Lecturer to Assistant Professor of Law.  
 Arnold Fraser Moir, B.A., LL.B., LL.M., Sessional Instructor in Law.

#### *Faculty of Medicine*

John William Scott, M.D., C.M., F.R.C.P.(C.), F.A.C.P., Dean of the Faculty of Medicine.  
 Herbert Edward Rawlinson, M.D., M.Sc., Ph.D., from Associate Professor to Professor of Anatomy, and Secretary of the Faculty of Medicine.  
 Harold Vincent Rice, M.D., Ph.D., Professor of Physiology.  
 William Christopher Stewart, M.A., M.D., C.M., from Assistant Professor to Associate Professor of Physiology.  
 James Hill Stirrat, B.Sc., M.B., Ch.B., M.D., Associate Professor of Bacteriology.  
 Jules Tuba, M.Sc. Ph.D., from Assistant Professor to Associate Professor of Biochemistry.  
 Donald Robert Wilson, B.A., M.D., C.M., F.R.C.P.(C.), from Lecturer to Assistant Professor of Medicine.  
 Robert Llewellyn Anderson, M.D., F.R.C.S.(C.), F.A.C.S., from Assistant Clinical Professor to Clinical Professor of Surgery.  
 Walter Stirling Anderson, B.Sc., M.D., M.S., F.R.C.S.(C.), F.A.C.S., from Lecturer to Clinical Professor of Surgery.  
 Robert Graham Huckell, M.D., C.M., F.A.O.S., from Assistant Clinical Professor to Clinical Professor of Orthopedic Surgery.  
 Walter Campbell MacKenzie, B.Sc., M.D., C.M., M.S., F.A.C.S., F.R.C.S.(C.), from Lecturer to Clinical Professor of Surgery.  
 Nesbitt Edgar Alexander, M.D., F.A.C.S., from Assistant Clinical Professor to Associate Clinical Professor of Surgery.  
 Charles Brambell Rich, B.S., M.R.C.S., L.R.C.P., F.R.C.P.(C.), from Lecturer to Assistant Clinical Professor of Medicine.  
 Robert Kenneth Colquhoun Thomson, B.Sc., M.D., from Lecturer to Assistant Clinical Professor of Neurology.  
 John Weightman Bridge, M.B.E., B.A., M.D., C.M., from Instructor to Lecturer in Clinical Surgery.  
 Max Edwin Geissinger, M.D., F.R.C.S.(C.), from Instructor to Lecturer in Clinical Surgery.

Samuel Hanson, m.i.d., M.D., Lecturer in Pathology.  
 Edward Hitchin, M.D., from Instructor to Lecturer in Clinical Surgery.  
 Louis Phillippe Mousseau, M.D., F.A.C.S., F.R.C.S.(C.), from Instructor to Lecturer in Clinical Surgery.  
 Olav Rostrup, M.D., F.R.C.S.(C.), from Instructor to Lecturer in Orthopedic Surgery.  
 Floyd Silas Beverly Rodman, M.Sc., Ph.D., M.D., Lecturer in Therapeutics.  
 Gordon Neil Tucker, M.D., from Instructor to Lecturer in Urologic Surgery.  
 Moses Weinlos, B.A., M.D., F.R.C.S.(C.), F.R.C.S., from Instructor to Lecturer in Clinical Surgery.  
 William James Downs, B.A., M.D., C.M., Instructor in Clinical Medicine.  
 Hector Ewart Duggan, M.D., Instructor in Radiology.  
 Albert William Hardy, M.D., F.A.C.S., Instructor in Clinical Surgery.  
 John McCracken Lees, M.D., Instructor in Clinical Surgery.  
 Richard Poirier, M.D., Instructor in Pediatrics.  
 Sidney Spaner, B.A., M.D., Instructor in Psychiatry.  
 James Anthony Gillett, M.B., B.Sc., M.R.C.S., D.T.M. & H., M.P.H., Sessional Instructor in Public Health.  
 Alfred Edwin Harper, M.Sc., Sessional Instructor in Biochemistry.  
 James Duncan Munroe, M.D., D.T.M. & H., D.P.H., Sessional Instructor in Bacteriology.  
 Donald Russell Stanley, M.Sc., Sessional Instructor in Hygiene.  
 James Overgard Metcalfe, B.Sc., M.D., Demonstrator in Physiology.  
 Herman Arthur Myers, B.Sc., M.D., Demonstrator in Anatomy.  
 Doris Elspeth Mackay, B.Sc., M.D., Demonstrator in Pharmacology.  
 Thomas Garfield Otto, M.D., Demonstrator in Anatomy.  
 Anthony Loudon Peers, B.A., M.R.C.S., L.R.C.P., Demonstrator in Clinical Medicine.  
 David Lloyd Phillips, M.D., Demonstrator in Physiology.  
 Frank Hastings Hamilton Mewburn, O.B.E., V.D., B.Sc., M.D., C.M., F.R.C.S.(C.), F.A.C.S., Honorary Clinical Professor of Orthopedic Surgery.  
 John Hislop Sturdy, M.D., Honorary Instructor in Pathology.

#### *School of Nursing*

Helen Eileen Marie Penhale, B.Sc., M.S., R.N., from Associate Professor to Professor of Nursing.

#### *School of Pharmacy*

Mervyn James Huston, M.Sc., Ph.D., from Associate Professor to Professor of Pharmacy, and from Acting Director to Director of the School of Pharmacy.

#### *Library*

Evelyn Joan Dafoe, B.A., B.L.S., Junior Library Assistant.

#### *Department of Physical Education*

Luther Goodwin, B.A., M.Ed., Assistant Professor of Physical Education, Calgary Branch.

William Donald Smith, B.P.H.E., M.A., from Lecturer to Assistant Professor of Physical Education.

Herbert John McLachlin, B.Sc. in Phys. Ed., Lecturer in Physical Education.



### *Other Appointments*

Maimie Shaw Simpson, M.Sc., M.Ed., Warden of Pembina Hall.

Ernest Carl Shortliffe, B.A., Warden of Assiniboia Hall during Professor Ryan's leave of absence.

Margaret Jane Lipsey, B.Sc., Dietitian in the Education Cafeteria.

William Dewar McDougall, M.A., Ed.D., Chairman of the First Year Committee.

John Maclean Whidden, B.Com., Secretary of the Board of Governors.

### **Table III.—Leave of Absence for Advanced Study**

Maurice Lewis Van Vliet, M.Sc., Professor of Physical Education.

Sperry David Fraser, D.D.S., Associate Professor of Prosthetic Dentistry.

Hugh Alton MacGregor, M.Sc., Associate Professor of Education (Sabbatical).

John Lewis Morrison, M.Sc., Ph.D., Assistant Professor of Chemistry (Sabbatical).

Aylmer Arthur Ryan, M.A., Assistant Professor of English.

Grace Eleanor Cairns, B.Sc., Dietitian, University Cafeteria, and Instructor in Household Economics.

Mary Isabel Grant, B.Sc., Library Assistant, Calgary Branch.

Helen Barbara Stadelbauer, Lecturer in Art.

### **Table IV.—Retirements**

John Andrew Allan, M.Sc., Ph.D., F.R.S.C., Professor of Geology.

James Robert Fryer, M.A., Ph.D., Professor of Genetics and Plant Breeding.

Frank Hastings Hamilton Mewburn, O.B.E., V.D., B.Sc., M.D., C.M., F.R.C.S. (C.), F.A.C.S., Clinical Professor of Orthopedic Surgery.

### **Table V.—Resignations**

George Otty Langstroth, B.A., Ph.D., F.R.S.C., Professor of Physics.

George Kendrick Haverstock, B.A., Associate Professor of Education.

Roderick Archibald McEwen, D.D.S., Associate Professor of Prosthetic Dentistry.

Joseph Morrow Scott, M.Sc., Associate Professor of Education.

Whitmore Pipes Calhoun, B.A., D.D.S., Assistant Professor of Operative Dentistry.

Henry Weldon Hewetson, M.A., Assistant Professor of Political Economy.

John Wallace Howe, B.S.A., M.S., Ph.D., Assistant Professor of Animal Science.

Richard Lee Hughes, B.Sc., M.A., Assistant Professor of Physical Education.

Sheila Jean Murray, B.Sc., Lecturer in Household Economics.

Angus Cecil McGugan, M.D., D.P.H., Lecturer in Public Health.

Ernest Raymond Whitehouse, B.A., Lecturer in Drama.

Edwin Keith Cumming, B.Eng., Sessional Lecturer in Mechanical Engineering.

James McKenzie Sinclair, B.A., M.D., Instructor in Clinical Medicine.

### **Table VI.—Staff Recognition**

Dr. J. A. Allan, Professor of Geology: In recognition of his forty years of geological work in the Rocky Mountains, the Geographic Boards of Canada and Alberta have named a mountain in the Canmore region after Dr. Allan.

Miss Grace L. Duggan, Assistant Professor of Household Economics: Miss Duggan has been awarded a special fellowship to survey home economics education in Canada for the Canadian Home Economics Association.



Dr. E. J. H. Greene, Assistant Professor of French: Dr. Greene's doctorate thesis on T. S. Eliot has received high commendation from T. S. Eliot himself as well as from Professor McLuhan, of Toronto, a leading authority on the subject.

Dr. W. Scott Hamilton, Dean of the Faculty of Dentistry: Dr. Hamilton has been appointed a Fellow in Dental Surgery of the Royal College of Surgeons of England.

Dr. R. L. Rutherford, Associate Professor of Geology: Dr. Rutherford has been appointed a member of the Privy Council's National Advisory Committee on Research in Geological Sciences.

Dr. P. S. Warren, Professor of Geology: In recognition of Dr. Warren's many years of research into the paleontology and stratigraphy of Alberta, Imperial Oil Limited has provided \$600 for the purchase of the Catalogue of Foraminifera of the American Museum of Natural History, which will be donated to the University Library at his request.

Dr. D. R. Wilson, Assistant Professor of Medicine: Dr. Wilson has been awarded the Markle Scholarship, which will enable him to devote full time to medical teaching and research. As part of a programme to keep young doctors on the staffs of Medical Schools, the John and Mary R. Markle Foundation will pay the University a grant of \$5,000 a year for a five-year period.

Table VII.—Registration

	Civilian				Rehabilitation				Totals									
	Men		Women		Men		Women		Men		Women							
	47-48	48-49	47-48	48-49	47-48	48-49	47-48	48-49	47-48	48-49	47-48	48-49						
<b>TOTAL REGISTRATION</b> (Full and Summer Session and short courses)	1764	2101	1731	2336	3495	4437	2644	2176	108	74	2752	2250	4408	4277	1839	2410	6247	6687
Add cancellations													*Banff School Add				575	....
																	6822	6687
																	76	106
																	6898	6793
<b>FULL SESSION</b>																		
1. Arts and Science:																		
B.A.	59	62	143	143	202	205	107	68	17	13	124	81	166	130	160	156	326	286
B.Sc.	259	237	86	78	345	315	250	160	9	4	259	164	509	397	95	82	604	479
B.A., B.Com.	5	6	3	3	5	6	3	2	...	...	3	2	8	8	...	...	8	8
B.A., B.Ed.	...	2	...	...	3	2	...	...	...	...	...	...	...	2	3	...	3	2
B.A., B.Sc. (Eng.)	...	1	...	...	2	1	...	...	...	...	...	...	...	1	...	...	2	1
B.A., LL.B.	41	35	1	4	42	39	43	13	2	...	45	13	84	48	3	4	87	52
B.Sc., D.D.S.	13	11	...	...	13	11	13	5	...	...	13	5	26	16	...	...	26	16
B.Sc., M.D.	35	61	4	7	39	68	71	26	2	3	73	29	106	87	6	10	112	97
Pre-Dental	11	12	...	...	11	12	13	3	...	...	13	3	24	15	...	...	24	15
	427	427	238	232	665	659	501	277	30	20	531	297	928	704	268	252	1196	956
2. Agriculture	117	126	7	4	124	130	215	212	...	...	215	212	332	338	7	4	339	342
3. Commerce	58	83	14	17	72	100	242	142	5	4	247	146	300	225	19	21	319	246
4. Dentistry	27	20	1	1	28	21	86	102	...	...	86	102	113	122	1	1	114	123
5. Education:																		
B.Ed.—4 year	67	101	75	135	142	236	28	22	3	1	31	23	95	123	78	136	173	259
B.Ed.—3 year	11	3	17	3	28	6	254	126	22	11	276	137	265	129	39	13	304	143
B.Ed. in Agr.	3	3	...	...	3	3	7	3	...	...	7	3	10	6	...	...	10	6
B.Ed. in H.Ec.	...	...	4	1	4	1	...	...	...	...	...	...	...	...	4	1	4	1
B.Ed. in Ind. Arts	1	...	...	...	1	...	5	16	...	...	5	16	6	16	...	...	6	16
B.Ed. after B.A., B.Sc. etc.	...	6	1	4	1	10	1	9	...	1	...	10	1	15	...	...	2	20
Jr. E. and I.	81	61	146	150	227	211	2	3	...	...	2	3	83	64	146	150	229	214
Sr. E. and I.	4	4	5	7	9	11	...	1	...	...	...	1	4	5	5	7	9	12
Total in Edmonton	174	178	254	300	428	478	297	180	25	13	322	193	471	358	279	313	750	671

\*Total registration given in previous year's report does not include 520 students at Banff School of Fine Arts in non-credit courses, and 55 in University credit courses.

Table VII.—Registration—Continued.

	Civilian			Rehabilitation			Totals		
	Men 47-48 48-49	Women 47-48 48-49	Total 47-48 48-49	Men 47-48 48-49	Women 47-48 48-49	Total 47-48 48-49	Men 47-48 48-49	Women 47-48 48-49	Grand Total 47-48 48-49
Calgary:									
B.Ed.—4 year	3	17	9 34	5	3	5 3	8	20	14 37
B.Ed. in Ind. Arts	4	7	4 7	39	22	39 22	43	29	43 29
Jr. E. and I.	25	30	109 128	3	1	5 2	28	31	114 130
Sr. E. and I.	2	2	4 2	1	...	1 ...	3	2	5 2
B.Ed.—3 year	...	1	1 1	2	...	2 ...	2	...	...
B.Ed. in Agr.	2	...	2	...	...	...	...	...	...
Total in Calgary	36	54	129 171	50	26	52 27	86	80	181 198
Total in Education	210	232	557 649	347	206	374 220	557	438	931 869
6. Engineering:									
Chemical Eng.	46	65	47 66	111	122	111 122	157	187	158 188
Civil Eng.	61	70	62 71	148	149	148 149	209	219	210 220
Electrical Eng.	52	53	52 53	167	149	167 149	219	202	219 202
Mining Eng.	21	24	21 24	101	86	102 86	123	110	123 110
Petroleum Eng.	2	9	2 9	...	39	39 ...	61	...	61 ...
Engineering Physics	4	22	5 22	12	13	12 13	16	22	17 23
Not specified	95	80	95 82	140	18	140 18	235	98	235 100
	279	323	282 328	680	576	680 576	959	899	962 904
7. Household Economics:									
B.Sc.H.Ec.	...	...	88 81	...	...	13 4	...	...	101 85
B.H.Ec.	...	...	3 1	...	1	1 ...	...	...	4 1
	...	...	...	...	...	...	...	...	...
	20	37	91 82	59	75	14 4	79	112	105 86
8. Law	102	88	117 104	84	118	86 120	186	206	203 224
9. Medicine									
10. Nursing:									
B.Sc.	...	...	101 104	...	...	3 4	...	...	104 108
Diploma	...	...	112 106	...	...	1 1	...	...	113 107
Dip. in Pub. Health	...	...	2 9	...	...	2 2	...	...	4 9
Dip. in T. and S.	...	...	2 4	...	...	...	...	...	2 4
	...	...	217 223	...	...	6 5	...	...	223 228
11. Pharmacy:									
B.Sc.	21	29	42 47	65	74	68 76	86	103	110 123
Diploma	...	...	1	9	9	...	9	...	10 ...
	21	29	43 47	74	74	77 76	95	103	120 123

<b>12. Graduates:</b>		18	16	7	8	25	24	18	19	2	2	20	21	36	28	9	2	45	30
M.A.	24	16	3	2	2	27	18	12	13	...	...	12	13	36	36	3	10	39	46
M.Sc. (Arts)	19	5	...	1	1	9	6	7	6	...	...	7	6	16	11	...	1	16	12
M.Sc. (Agr.)	19	19	...	1	1	19	20	5	4	...	...	5	4	24	23	...	1	24	12
M.Sc. (Eng.)	...	...	...	...	...	...	1	...	3	...	...	...	3	...	4	...	...	...	4
M.Sc. (Pharm.)	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
M.Sc. (Med.)	24	22	4	5	28	27	19	33	44	...	2	33	46	57	66	4	7	61	73
M.Ed.	12	13	9	6	21	27	7	7	11	...	3	10	11	19	24	12	6	31	30
Special	4	6	...	1	4	7	...	...	...	...	...	...	...	4	6	...	1	4	7
B.D.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13. Auditors	110	99	23	24	133	123	...	82	100	5	4	87	104	192	199	28	28	220	227
14. Specials and Partial	2	5	19	13	21	18	...	2	5	2	...	4	5	4	10	21	13	25	23
Less Cancelled	29	48	58	59	87	107	...	17	33	1	2	18	35	46	81	59	61	105	142
	1402	1517	1055	1111	2457	2628	...	2389	1920	95	57	2484	1977	3791	3437	1150	1168	4941	4605
																		76	
																		4865	4605
<b>II. SUMMER SESSION</b>		355	426	674	728	1029	1154	254	236	14	15	268	251	609	662	688	743	1297	1405
Edmonton	21	30	1	...	22	30	...	27	12	...	...	27	12	48	42	1	...	49	42
Calgary	4	23	15	42	19	65	...	1	...	...	...	1	...	5	23	15	42	**20	65
Banff School:	...	82	...	437	...	519	...	...	4	...	1	...	5	...	86	...	438	...	524
Univ. credit	...	6	...	13	...	19	...	...	...	...	...	...	...	...	6	...	13	...	19
Non-Univ. credit:	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Banff	380	567	690	1220	1070	1787	...	282	252	14	16	296	268	662	819	704	1236	*1366	2055
Jasper	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<b>III. SHORT COURSES</b>		10	17	...	...	10	17	3	4	...	...	3	4	13	21	...	...	13	21
Dip.—Dairying	...	...	3	5	3	5	...	...	...	...	1	...	1	...	...	3	6	3	6
Nurs. Adv. Obstet.	10	17	3	5	13	22	...	3	4	...	1	3	5	13	21	3	6	16	27
Grand Totals	1764	2101	1731	2336	3495	4437	...	3644	2176	108	74	2752	2250	4408	4277	1839	2410	6247	6687
																		575	...
																			6822
																			6687

\*The figure for 1948-49 does not include cancellations.  
 \*\*Total Banff School registration for University credit is 75.  
 \*Banff School registration in previous report does not include 520 students in non-credit courses and 55 in University credit courses.

**Table VIII.—Distribution of Full-time Students According to Faculty or School and Year of Course, Session 1948-49**

School or Faculty	First Year	Second Year	Third Year	Fourth Year	Fifth Year	Total
Arts and Science .....	265	325	298	66	*2	596
Agriculture .....	45	74	123	100	....	342
Commerce .....	69	69	104	4	....	246
Dentistry .....	27	25	51	20	....	123
Education† .....	474	179	139	73	....	869
Engineering .....	165	201	302	236	....	904
Household Economics .....	29	25	32	....	....	86
Law .....	55	40	17	....	....	112
Medicine .....	50	52	44	34	44	224
Nursing .....	83	48	51	17	29	228
Pharmacy .....	48	40	35	....	....	123
	<u>1310</u>	<u>1078</u>	<u>1196</u>	<u>550</u>	<u>75</u>	<u>4213</u>
Add:						
School of Graduate Studies .....						220
B.D. ....						7
Auditors .....						23
Specials and Partials .....						142
						<u>4605</u>

†Plus 4 unclassified.

\*5th year B.A., B.Com.

**Table IX.—Distribution of Students According to Home Address and Birthplace, Session 1948-49**

A. British Empire and Commonwealth:	Home Address	Birthplace
(a) Canada		
Edmonton .....	1818	784
Calgary .....	602	553
Lethbridge .....	100	111
Medicine Hat .....	49	65
Red Deer .....	49	43
Vegreville .....	17	42
Wetaskiwin .....	27	37
Camrose .....	29	39
Cardston .....	26	44
Other Alberta towns .....	1602	1700
	<u>4319</u>	<u>3418</u>
Alberta .....		
Nova Scotia .....	2	19
Quebec .....	2	13
Ontario .....	18	92
Manitoba .....	21	133
Saskatchewan .....	121	429
British Columbia .....	102	136
Yukon & North West Territories .....	1	1
Prince Edward Island .....	....	7
New Brunswick .....	....	6
	<u>4586</u>	<u>4254</u>
(b) Other Parts of the British Empire and Commonwealth		
British Isles .....	....	101
Dominions .....	2	8
Crown Colonies .....	1	2
	<u>3</u>	<u>113</u>
B. Countries Outside the British Empire and Commonwealth		
United States of America .....	3	72
Poland .....	....	51
Russia and Ukraine .....	....	19
Balkan States (Yugoslavia, Roumania, Bulgaria, Albania, Greece, Turkey) .....	1	9
Scandinavian States (Sweden, Norway, Denmark, Iceland) .....	1	13
Germany, Austria .....	....	9
Czechoslovakia .....	....	20
Other countries .....	2	34
Not specified .....	9	13
	<u>16</u>	<u>238</u>
	<u>4605</u>	<u>4605</u>

**Table X.—Gifts**

From the National Research Council, \$38,876.71 in accountable advances for research work under the direction of the following staff members: Dr. C. F. Bentley, \$640; Dr. R. K. Brown, \$982.40; Dr. M. M. Cantor, \$1,680; Dr. W. G. Corns, \$2,107.85; Dr. S. G. Davis, \$620; Dr. G. W. Govier, \$350; Dr. E. H. Gowan, \$622.93; Dean R. M. Hardy, \$200; Dr. W. E. Harris, \$1,200; Dr. A. W. Henry, \$2,947.57; Dr. E. O. Hohn, \$940; Dr. G. Hunter, \$4,220; Dr. L. P. V. Johnson, \$800; Dr. J. L. Morrison, \$300; Dr. A. G. McCalla, \$5,694.18; Dr. L. W. McElroy, \$890; Dr. K. B. Newbound, \$350; Dr. J. D. Newton, \$1,674.77; Dr. H. Orr, \$2,700; Dr. W. Rowan, \$200; Dr. R. B. Sandin, \$2,125; Dr. D. B. Scott, \$274.53; Dr. D. E. Smith, \$1,325; Dr. W. C. Stewart, \$60; Dr. H. R. Thornton, \$1,067.48; Dr. J. Tuba, \$2,520; Dr. O. J. Walker, \$1,885; Professor F. W. Wood, \$500.

From Imperial Oil Limited: Robot Podbielniak apparatus and two companion units, valued at approximately \$9,500, to assist petroleum research in the Department of Chemical Engineering; seven used steam engines for use in the Faculty of Engineering; and in recognition of Dr. P. S. Warren's many years of research into the paleontology and stratigraphy of Alberta, \$600 to purchase the Catalogue of Foraminifera of the American Museum of Natural History, to be donated to the Library at his request.

From the Alberta Branch of the Canadian Cancer Society, a Scopicon micro-projector for use in the Department of Pathology.

From the National Cancer Institute of Canada: \$2,484.53 transferred from Dr. H. V. Rice's grant at the University of Manitoba, to continue his project at the University of Alberta; and grants for cancer research under the direction of the following staff members: Dr. R. K. Brown, \$1,650; Dr. H. E. Rawlinson, \$2,000; Dr. R. B. Sandin, \$2,800; Dr. J. Tuba, \$1,150.

From the Defence Research Board, grants of \$6,675 to Dr. D. E. Smith and \$500 to Professor B. Hocking.

From the Rockefeller Foundation, a grant of \$2,000 for research in social sciences in the Department of Political Economy.

From the Canadian Foundation for the Advancement of Pharmacy to the School of Pharmacy, grants totalling \$900 for research projects, \$300 to assist the revision of the Canadian Formulary, and \$750 for a teaching fellowship.

From Science Service, Dominion Department of Agriculture, grants of \$800 to Professor E. H. Strickland for research on the nutritional requirements of the Pale Western Cutworm, and \$750 to the Department of Botany to assist an ecological survey of northern Alberta.

From Merck and Co. Limited, \$1,500 to assist Dr. D. R. Clandinin's poultry nutrition research.

From United Grain Growers Limited, \$1,000 in aid of cereal variety testing work in the Department of Plant Science, and \$300 for research on turkey nutrition in the Department of Animal Science.

From North American Cyanamid Limited, \$1,200 for research on chemical defoliation of legume seed crops, under the direction of Dr. W. G. Corns.

From a group of flour mills, grants to the Department of Plant Science for research on varieties of soft wheat in Alberta, as follows: Ellison Milling and Elevator Co. Limited, \$250; Maple Leaf Milling Co. Limited, \$1,200; Ogilvie Flour



Mills Co. Limited, \$500; Purity Flour Mills Limited, \$1,200; Robin Hood Flour Mills Limited, \$1,200.

From the Division of Botany and Plant Pathology, Dominion Department of Agriculture, \$1,100 to Dr. E. H. Moss to assist an ecological survey of the Peace River area.

From an anonymous donor, \$1,000 for cancer research under the direction of Dean J. W. Scott.

From the Alberta Seed Growers' Co-operative Limited, \$1,000 as the first of five annual contributions to a research project on seed setting and forage crop production in the Department of Plant Science.

From Canada Cement Company Limited, \$500 contribution to the Concrete Research Fund of the Department of Civil Engineering.

From the Consolidated Mining and Smelting Company of Canada Limited, \$500 in further assistance of urea feeding investigations in the Department of Animal Science.

From the Barley Improvement Institute, \$500 as the first instalment of the 1949 grant in aid of the barley breeding programme in the Department of Plant Science.

From the Alberta Dental Association, \$200 to be added to the photographic fund of the Faculty of Dentistry, and \$100 donated by Dr. Wright of Hamilton, to set up a special dental fund.

From Professor William C. Steere, Ann Arbor, several hundred corrugated ventilators and other plant-drying equipment for the Department of Botany.

From Mr. C. M. Clarke, Teepee Creek, 65 divisions of the best varieties of peonies for the Department of Plant Science.

From Mr. Claude Gallinger, Edmonton, one-year loan of a young Shorthorn bull to the Department of Animal Science.

From Beatty Bros. Limited, an electric washer and an ironer, for use in the School of Household Economics.

From the Hoover Company Limited, a vacuum cleaner for use in the School of Household Economics.

From the Class of 1949, \$110 for the purchase of an easy-chair and footstool for the music listening room of the Rutherford Library.

From the College of Physicians and Surgeons of Alberta, \$200 for the purchase of books for the Medical Library; by the will of the late Mr. T. M. Wears, Strathmore, several books on Shakespeare; from Mr. Brian Wallace, the J. N. Wallace library of Canadiana; from Mrs. W. N. Watson, a collection of books on economics from the library of the late Mr. William Newton Watson; also gifts of books from Dr. R. K. Gordon, Mr. G. W. Auxier, Dr. R. F. Nichols, Mr. Martin Nordegg, and Mr. N. Campbell Fraser.

From Dr. and Mrs. Robert Newton, 55 pictures as the first instalment of "The Emma Read Newton Collection".

To the Banff Foundation for the building programme of the Banff School of Fine Arts: from an anonymous donor, \$4,000; from Sicks' Breweries Limited, \$1,000; from the United Farmers of Alberta Co-operative Limited, \$250; from Miss Anne Laidlaw, Toronto, \$150; from the Skylark Club of Brantford, Ontario, \$25; and from Mr. Cyril T. Beaumont, Calgary, \$100.

From Mrs. J. H. Woods, of Calgary, "The Lieut.-Col. J. H. Woods Memorial Fund" of \$122,818, to be used to construct two chalets for the Banff School of Fine Arts.

From the "Friends of the University": 91 individual donors, \$727.50; Burns and Company, \$500 for research in the Department of Animal Science; an anonymous donor, \$50 for cancer research; T. Eaton Co. Ltd., \$100; Edmonton Journal, \$100; Canadian Western Natural Gas, \$1,200 for scholarships.

### **Table XI.—New Scholarships, Prizes, and Medals**

#### *Available to University of Alberta Students*

From 912 donors, \$83,580.90 to establish "The Memorial Scholarship Fund", to provide scholarships for the university education of the sons and daughters of those who served in the Second Great War. The following are among the contributors: University of Alberta Alumni Association, \$15,424; University of Alberta Students' Union, \$10,281.79; University of Alberta staff, \$1,669.05; Rotary Club, \$5,627.24; Law Society of Alberta, \$5,000; T. Eaton Co., \$1,700; Judges of the Province of Alberta, \$6,500; Hudson Bay Co. Ltd., \$1,500; Northwestern Utilities Ltd., \$1,500; University Women's Club, \$1,508.75; Capital City Box Co., \$1,000; McCosham Storage Co. Ltd., \$1,000; Alberta Food Products Association, \$1,000; Sicks Brewery Ltd., \$1,000; Kinsman Club of Edmonton, \$1,000; Etter-McDougall Ltd., \$500; the Jewish community of Edmonton, \$10,010; the Jewish community of Calgary, \$7,175.

By the will of the late Dr. Norman L. Terwillegar, \$10,000 to be known as "The Terwillegar Memorial Fund", in memory of his two sons who died in the Second Great War, the proceeds of which are to be used, under the control of his son-in-law and the Dean of Medicine, for scholarships in Medicine and Engineering.

From the estate of the late Mrs. Emma Clarissa Malcolm, \$7,256.25 to establish "The Emma Clarissa Malcolm Fund", to be used primarily for scholarships for the children of her brothers and sisters, and their descendants.

From the Barclay family of Calgary, through Miss Catherine E. Barclay, an annual student fellowship of \$150 to the Banff School of Fine Arts, to be known as "The Elsie Wilson Barclay Student Exchange Fellowship in French", to facilitate exchange of students between Quebec and Western Canada and between France and Western Canada.

From the Calgary Herald, a scholarship of \$1,000 (or \$1,100 if the winner is a former Calgary Herald carrier) payable over four years to a Southern Alberta student entering the Chemical or Petroleum Engineering course.

From Imperial Oil Limited, four scholarships of \$250 each, awarded by the company to children of their employees.

From the Imperial Order Daughters of the Empire, a bursary of \$1,600 (\$400 a year for four years), to be known as "The Second War Memorial Bursary", to be awarded in 1949 to a child of a deceased or permanently disabled man or woman who served in the Armed Forces; also a bursary of approximately \$200 available to a University of Alberta graduate for training in social work at a Canadian school.

From the Zeta Psi Educational Foundation, a scholarship of \$200 to be awarded to a student selected by the University of Alberta who is not a member of the Zeta Psi Fraternity, in addition to a similar scholarship awarded by the Foundation directly to a Zeta Psi student in the University of Alberta.

From the Alberta Wheat Pool, a scholarship of \$150 in Household Economics, to be awarded to a student selected by the Provincial Department of Agriculture from the members of the Girls' Garden Clubs of the Province.

From the Brewers and Hotelkeepers of Manitoba, a scholarship of \$150 to be awarded to a student of their selection.

From the Corps of Royal Canadian Engineers, "The R.C.E. Memorial Scholarship" of the value of \$125, to be awarded annually to a student who has completed the third year of Engineering is and a member in good standing of the C.O.T.C.

From the Alberta Pharmaceutical Association, an annual \$100 scholarship to be known as "The Jake Warner Scholarship".

From the Canadian Gamma Chapter of Delta Delta Delta Sorority, one or more annual scholarships of \$100 for women students of their selection.

From Dr. E. C. May, an annual prize of \$50, to be known as "The Senior Greek Prize".

From the Rankin Medical Journal Reporting Club, two annual prizes of \$25 each, to be known as "The Rankin Club Prize in Bacteriology" and "The John Weightman Bridge Prize in Surgery" respectively.

From the 1949 Class of the Faculty of Education, a \$15 book prize.

From the Edmonton Academy of Medicine, "The Pope Medal", in honour of Dr. E. L. Pope, to be awarded annually in the final year of Oral Medicine.

From the French Embassy in Ottawa, a bronze medal of Bergson and two books, for award to students in French classes.

From the Volunteer Overseas Medical Officers Association, \$100 to complete a fund to endow "The Moshier Memorial Medal" in perpetuity.

From a group of Alberta dentists, Drs. L. T. Allen, G. Baden Powell, H. E. Bedingfield, J. W. Clay, E. F. Doyle, S. C. Hodgson, R. R. McIntyre, J. S. Stewart, and J. Zimmerman, annual contributions averaging \$50 each to build up the Post-Graduate Scholarship Fund in the Faculty of Dentistry, a total of \$1,375 to date.

#### *Available to Western Board of Music Students*

From the Department of Economic Affairs, Province of Alberta, ten \$100 scholarships.

From the Thomas Greentree Chapter, I.O.D.E., Drumheller, an increase in the prizes offered from \$30 to \$75.

From Mr. F. Orlaw, National Music Company, \$51.60 to establish, in co-operation with the Oxford University Press, "The National Music Company-Oxford University Press Book Prizes".

From the Roxane Choir, St. Paul, four prizes, one of \$10 and three of \$5, for award to candidates in St. Paul.

From Mr. G. D. Johnston and Mr. E. E. Taylor, Peace River, a bursary of \$25 available to students in Peace River and vicinity.

From the Peace River Chapter, I.O.D.E., a bursary of \$25 for award to students in the Peace River district.

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## **Report of Dean John Macdonald of the Faculty of Arts and Science**

### *Calgary Branch—Faculty of Education*

The teaching arrangements for the subjects in this Faculty in the Calgary Branch are now on a permanent basis with the appointment of suitable instructors, one for Mathematics and Physics, one for Chemistry and one for English and French. Dr. Self has continued in charge of History and Political Economy. The total number of registrations in Arts and Science courses was 39.

### *Recommendations for Degrees*

The number of students recommended for degrees at the May Convocation is as follows:

For the B.A. degree .....	103
For the B.Sc. degree .....	214

### *Progress During the Session*

The only matter of general interest under this heading is the reception and consideration by the Faculty of the Report of Professor Andrew Stewart's Committee on General Education. This has led to certain changes in degree programs. The nature of these changes has been already reported to the General Faculty Council and will be again reported to the Senate at its May meeting in response to a request for such a report.

### *Pre-Medicine and Pre-Dentistry*

The pressure on these courses still continues and the admission quota has been retained. It is likely, however, that by next September normal conditions will return with respect to Pre-Medicine.

### *Departmental Reports*

I wish to append reports concerning some individual departments as follows:

*Botany, Report of Dr. E. H. Moss*—During the year instruction has been given to approximately 500 students, enrolled in eight courses and representing four faculties and two schools of the University. Most members of the Department have been carrying considerably more than a normal load of teaching and administrative work.

Research has continued along the same lines as in the previous years. Dr. E. H. Moss spent most of the summer on botanical field work, supported by Science Service. On invitation of the editor, Dr. R. G. H. Cormack has prepared a comprehensive article on root-hair development for publication in a forthcoming issue of the *Botanical Review*.

*Chemistry, Report of Dr. O. J. Walker*—There has been a definite decrease in the registration in the junior courses, owing to the practical disappearance of veteran students, but this has been partly compensated by an increase in senior courses where veterans are now concentrated. There is still a great demand for Honors courses in Chemistry, with 53 students in the four years of the Honors course. Many of these who are now completing the fourth year are planning to continue for graduate work and have been awarded assistantships or fellowships at leading universities in Eastern Canada and the United States. At the present time there are about 45 graduates from this Department carrying on advanced work in other universities.

Research programs are being actually carried on with all members of the staff participating. Liberal assistance has been received from the National Research Council, the Research Council of Alberta, the Canadian Cancer Commission, and the Defence Research Board.

### *Fine Arts, Report of Professor H. G. Glyde.*

*Music*—Four courses were offered with a total registration of 52 students. Rather more than half of these were students in Education. In the Extension Division, a course in choral leadership lasting ten weeks was conducted on the campus with a registration of 45 people. The University has been urged to present this course in other centres, both urban and rural, as soon as possible. Reference should be made here to the conspicuously successful season enjoyed by the Mixed Chorus, which it is planned to take to certain points outside of Edmonton after the end of the session. A special Choral Music Library has been used extensively by choral leaders in the province and the service is greatly appreciated.

*Art*—Considerable work has been done here under the Extension Division, both on the campus and extramurally. The Fine Arts painting staff was responsible for the inauguration of eleven extension Art classes on the campus and ten Community Art classes. Further work under the Extension Division is being planned during May. An important feature of the Art Division is the Art exhibitions in the rotunda of the second floor of the Arts Building. These represented a wide

variety of styles and schools and have undoubtedly been one of the most effective informal educational influences to which the students have been subjected.

*Drama*—Though still somewhat handicapped for lack of the special kind of facilities that this activity requires, Mr. Orchard was provided, during this session, with facilities that enabled him to make a substantial beginning with the presentation of actual plays. A special series of such plays was presented this term as part of the Drama workshop arrangement and were later produced in Calgary in connection with the Dominion Drama Festival. The registration in Drama courses is still well maintained with students drawn from the Faculty of Education as well as from this Faculty.

*Geology, Report of Dr. J. A. Allan*—This Department now consists of five full-time members and the registration has been heavy, totalling 690 students in the various courses. The development of the petroleum resources in Alberta has attracted an increasing number of students to Geology as a profession. While petroleum geology is not offered as a separate course, the Department offers the basic courses and fundamental principles related to petroleum in several of the courses given. A new course, Micropaleontology, has specific application to petroleum exploration. Scholarships, assistantships and fellowships in other institutions are readily available to students with good scholastic standing. Requests for graduate work in Geology have been received from students in Great Britain, India, New Zealand, the United States and other places. All the members of the Department are prosecuting research work.

*Physics, Report of Dr. R. J. Lang*—The student enrolment in the Department of Physics continues to be very heavy, as there are 900 students, of which over one-half are from the Faculty of Engineering. Research activity is being carried on specifically in these fields: ozone of the upper atmosphere; the relationship between the radiation emitted by a spark source and the chemical materials of which the electrodes are composed; two projects on induced radioactivity; and a continuation of research on atomic structure which has been in progress for some years.

*Political Economy, Report of Professor A. Stewart*—The Department offered a new course in Farm Management to students in the Faculty of Agriculture. An extension of the courses offered in the field of Political Science has increased the general registration in the Department, especially in the honors and the graduate fields.

Research has been carried on in various fields. Mr. Hanson has continued his research work in municipal government and finance and, during the year, completed a report to the Department of Municipal Affairs on Municipal Administration. The Department also directed a study of employment in the coal industry of Alberta on behalf of the Research Council of Alberta and continued its participation in the Dairy Farm Cost Study sponsored by the Board of Public Utility Commissioners and the Provincial Department of Agriculture. A study of population changes in Alberta was carried out with assistance from the University Research fund. Professor Stewart assisted in the preparation of material for the representations of the Province before the Board of Transport Commissioners and was a member of the Royal Commission on Natural Gas. On the extension side, Dr. Mayo participated in one of the series of evening classes organized by Alberta College.

*Zoology, Report Dr. R. B. Miller*—This Department has found its new quarters in the Medical Building very satisfactory and has found itself capable of coping with a registration of over 600 students. Two new courses, each half a session, were given for the first time and dealt with conservation and wild life management. There were three graduate students working in the Department during the session. One of these will graduate this spring. Staff members are involved in research projects as follows: W. Rowan continues studies on the ten-year cycle, which have been assisted by J. E. Moore. Dr. Rowan, by invitation, in September, 1948, participated in a panel discussion on animal movements. This discussion was sponsored by the Centennial Celebration of the American Association for the Advancement of Science in Washington. R. B. Miller, in co-operation with the Provincial Fishery Branch, carried out surveys of the McLeod River Drainage, the Willow Creek Drainage, the Battle, Conjuring and Buck Lakes. Dr. Miller also is carrying on a research program on the control of infestation of whitefish with tapeworms. He was recently made Chairman of the Dominion-Provincial subcommittee with the duties of coordinating whitefish parasites research across Canada. Dr. Miller, by invitation, read a paper at a symposium on the Optimum Catch in Fisheries to a joint meeting of the American Society of Limnology and Oceanography, the Biometric Society of America and the Ecological Society.

### **Report of Professor Mabel Patrick, Director of the School of Household Economics**

Twenty members of the senior class have accepted student training positions, 15 in hospitals and 5 in commercial or other institutions. One has accepted a position as District Home Economist and one has been awarded a fellowship in Nutrition. Of the remaining 11, 2 plan to teach.

During this year, 3 graduates have obtained Master's degrees and 6 are continuing their studies, all on fellowships.

An attractive new laboratory in the Department of Household Economics has facilitated the work this year.

### **Report of Dean J. Macdonald, Chairman of the School of Commerce**

#### *Progress During Session*

Certain important changes are in process of occurring in the School. In the first place, I should mention that the School has been given a Director with the appointment of Professor Andrew Stewart to that post. Professor Winspear, who has been Acting Director, is now severing his connection with the School. A new staff appointment, which has been sanctioned for the Department of Political Economy, will likely provide an instructor who will be able to give assistance in the School in the field of Business Administration. It is planned also to reconsider the naming of certain courses in the School so as to make the organization clearer and to define more precisely the field covered by Accounting.

### **Report of Dean R. D. Sinclair of the Faculty of Agriculture**

The activities of the Faculty of Agriculture in the University of Alberta may be separated into two main divisions, (1) academic and (2) experimental. For convenience in presenting this report the work of the Faculty will be sub-divided under these headings.



It seems proper, however, as a preliminary to mention that in addition to teaching and participating in research work, members of the staff of the Faculty of Agriculture devote a considerable amount of time to extension and administrative work during the year. It is felt that the maintaining of close contact with the farm people of Alberta is of great importance to the Faculty and to the University as a whole. On the one hand staff members are kept closely in touch with the problems arising on the land and on the other hand the results of research are made available to farmers with the least possible delay. Direct communication with farmers has been made possible through addresses at farm meetings, agricultural short courses and field days, and by means of correspondence and personal interviews. A number of bulletins and circulars were issued during the year and radio talks were given on the Alberta Farm and Home Forum programme (CKUA). The Dean of the Faculty of Agriculture serves as chairman of a committee made up of representatives of the Faculty of Agriculture and the Alberta Department of Agriculture which directs the Alberta Farm and Home Forum programme. Close co-operation has been maintained with the Department of Extension of the University and the Extension Service of the Alberta Department of Agriculture and considerable material has been supplied for the farm broadcasts sponsored by the CBC Alberta station, CBX.

A number of staff members served during the year on national committees functioning under the authority of the National Advisory Committee on Agricultural Services and the National Research Council and on various agricultural committees operating in the provincial sphere.

### *Academic*

The increase in the size of third and fourth year classes necessitated considerable "sectioning" of laboratory groups, particularly in departments where floor space is limited. It was necessary to make use of the services of more student assistants and sessional appointees during the academic year.

A considerable number of third and fourth year students elected the "general course", but all of the "options" offered in the Faculty attracted students who were registered in their graduating year.

Ten students engaged in agricultural research were registered in the School of Graduate Studies. Of this number, two took their undergraduate training at other institutions. It was difficult to get sufficient graduate assistants, but it is expected that this situation will soon be remedied with the increase in the number of students graduating.

A six-months Dairy Short Course was offered again during the year under a joint arrangement between the Department of Dairying and the Dairy Branch of the Alberta Department of Agriculture, with assistance from Canadian Vocational Training. There was a renewal of interest in this course during the year with the result that registration was up to maximum capacity of 21 students.

In co-operation with the Department of Extension, short courses were offered to farm trade personnel of the Imperial Oil Company and to the Edmonton Chapter of the Appraisal Institute of Canada. Lectures and demonstrations were provided in connection with the Farm Young People's Week sponsored by the Department of Extension. This event provides a special opportunity for contact with the farm people of Alberta and with the various farm organizations of the Province.



From the academic standpoint results in the Faculty of Agriculture during the year were very gratifying. A very satisfactory relationship existed between students and staff. No cases requiring disciplinary action were reported to the office of the Dean. The Student-Faculty Relations Committee, established during the previous year, functioned to the mutual advantages of both parties. A third Annual Field Day was sponsored by the Agricultural Club and the student body participated in good spirit in the programme. A number of commercial organizations supported the event by contributing prizes and trophies.

### *Experimental*

The usual programme of research work in the various departments was maintained during the year. Several grants were received from commercial organizations and from the National Research Council. These assisted greatly in promoting active work on certain projects.

In the Department of Agricultural Engineering close contact was maintained with the farm machinery industry, particularly from the point of view of changes in designs and methods of operation of farm machinery. Close attention was paid to recent developments in connection with sugar beet harvesting equipment and various labor saving devices for the farm. Farm equipment companies continued their support of the Department in the matter of loaning machines for laboratory use during the term.

Feeding trials and laboratory studies were continued by the Department of Animal Science during the year. A project given special attention was concerned with determining the content of essential amino acids of a number of varieties of oats, barley, and wheat grown under various soil conditions. Results secured suggested that this work should be continued, since it may be quite significant in relation to livestock feeding.

Further work was done on the effect of the ration of the pregnant sow on pre-natal and post-natal development. A long term project on the use of urea in the ration of dairy cows was continued during the year. A co-operative project dealing with the supplementary feeding of pregnant ewes, sponsored by the National Sheep Committee, yielded further results. A survey of cobalt deficient areas of the Province, using flocks of sheep located in various areas, was undertaken in co-operation with Dominion Experimental Stations and Provincial Schools of Agriculture. In the field of beef cattle production, investigations were centered, as in the previous year, on determining the minimum amount of grain required to produce commercial beef of acceptable quality. Poultry research was expanded during the year. Studies related to the designing of more efficient chick and turkey starting rations were given special attention. Turkey breeding rations were investigated with special reference to the role of pantothenic acid in improving hatchability.

The twenty-seventh annual Feeders' Day was held early in June and again provided an opportunity to present to livestock producers the results secured from feeding experiments conducted during the year. This event is proving more popular as time goes on and undoubtedly makes a considerable number of new friends for the University each year.

Investigations in the Department of Dairying, which were assisted by a grant from the Committee on Agricultural Research Grants, led to the development of a

method for the quantitative estimation of milk lipase. This method was adapted to the measurement of bacterial lipase in cheese and in skim milk cultures of a number of species of bacteria. The National Research Council supported a study of methods of producing churning cream of high quality. Economical procedures were evolved and certain bacterially induced defects are being investigated along with growth characteristics of cryophilic bacteria.

In the Department of Entomology field and greenhouse experiments indicated that failure of Altaswede and Alsike clover to set seed is due more to the lack of suitable native bees for fertilization than it is to the activities of numerous red nymphs of the thrips, *Halporthrips leucanthemi* Sch., inhabiting the flower heads of these clovers. Studies on the nutrition of the Pale Western Cutworm have been initiated with the aid of a grant from the Dominion Department of Agriculture. Knowledge regarding the feeding habits of this insect is essential to the development of suitable control measures. Studies on the chemical control of black flies at the immature stages were continued during the year. Large scale field applications in Saskatchewan of the results obtained by the Department last year were outstandingly successful. Successful preliminary work on adult feeding habits and flight range of mosquitoes has been done. Insect damage to bolting silk in flour mills has been traced to the Cadelle, a beetle recently introduced to Alberta.

In the Department of Plant Science it was possible to expand certain phases of research work during the year largely as a result of financial assistance from the following organizations: The National Research Council, Purity Flour Mills Ltd., Maple Leaf Milling Co. Ltd., Robin Hood Flour Mills Ltd., Ogilvie Flour Mills Co. Ltd., Ellison Milling and Elevator Co., The Barley Improvement Institute, Line Elevator Farm Service, North American Cyanamid Ltd., United Grain Growers, Alberta Seed Growers' Association Ltd.

In cereal breeding, emphasis on barley and soft wheat continued with increased attention to winter wheat and oil crops. A barley hybrid (Newall x Olli) is being considered for licensing. The winter wheat work will be directed toward three main characteristics: winter hardiness, greater earliness, and baking quality. Forage crop research has continued to emphasize alfalfa studies. A new project on chemical defoliation of legume seed crops was initiated with the object of studying the possibility of hastening maturity and facilitating combine harvesting. Results were sufficiently promising to warrant further investigation.

The work in horticulture included vegetable trials carried out in co-operation with the Canadian Seed Growers' Association, the introduction of new varieties of plums and apricots, and the establishment of plantations of strawberries and raspberries with specially selected foundation stock. Over one hundred varieties of Iris are under trial for the Canadian Iris Society.

Chemical weed control work was again expanded, with considerable emphasis being placed on the effects of chemicals, particularly 2,4-D, on crops of barley and flax. Fundamental research on the effects of weed-killers was also carried on.

Ergot studies conducted during the year yielded results of immediate practical value in the development of simple control measures. A survey of barley diseases in Alberta was undertaken and studies were carried out on leaf roll of potatoes and rust of flax.

Visitors' Day was held on July 31st and attracted a large crowd. Seed growers and farmers are becoming increasingly aware of the importance of all types of

research and investigational work and appear to welcome an opportunity to visit the University fields and plots.

Soil survey work was continued during the year by the Department of Soils co-operating with the Dominion Department of Agriculture and the Research Council of Alberta. A report covering the general area between Spirit River and McLennan, in the Peace River district, is now in the course of preparation. Extensions of the earlier irrigation soil surveys, mainly east of Taber, were carried out during the year in anticipation of future irrigation development in that area.

The long term fertilizer and crop rotation trials on black and gray wooded soils were continued. These experiments again indicated the importance of using phosphate fertilizers on grain crops on many black soils and the remarkable value of sulphates when used on legume crops grown on deeply leached gray wooded soils.

Research work supported by the National Research Council, on soil microbiology, has led to the belief that legume inoculation cultures superior to those on the market at present can be developed. Field and laboratory investigations on water erosion of soils were revived, and it is proposed to start some experiments with radio-active sulphur, in co-operation with the Department of Physics, in order to obtain some fundamental information regarding the relative uptake of applied and natural sulphur by plants grown on gray wooded soils.

In conclusion it seems fitting to record that a very good spirit prevailed in the Faculty of Agriculture during the year 1948-49. Staff members devoted themselves energetically to instructing the enlarged classes and at the same time carried out their regular responsibilities in connection with research, extension, and administration.

### **Report of Dean W. Scott Hamilton of the Faculty of Dentistry**

The past year has been the most successful in the history of this Faculty. The occasion of the completion of the new clinic was marked by a suitable opening ceremony, followed by a two-day refresher course. About 150 practising dentists attended. Dr. Roy G. Ellis, Dean, Faculty of Dentistry, University of Toronto, was guest speaker.

Improvement in organization and the support of an energetic faculty, backed by Dr. Newton and the Board of Governors, have all contributed to an organization whereby improved teaching has resulted.

Through the generosity of the Kellogg Foundation, Dr. S. D. Fraser is at present attending the University of California on graduate study. The same fellowship will be available for the year 1949-50, when another member of the Faculty will proceed to further training.

Another fund has been made possible through contributions from members of the dental profession. The purpose of this is also to provide training at some other institution, for graduates from our Faculty.

Different members of the Faculty have taken part in extension work by appearing before societies and on convention programs. Dr. H. R. MacLean is a member of the sub-committee of the National Research Council. Two research projects are under his direction. One of these had to be temporarily discontinued because of lack of suitable personnel. The other is being carried on by Miss Coggles, a Master of Science student in Chemistry. Dr. J. W. Neilson, in co-operation with

Dr. J. R. Vant, Department of Obstetrics, is investigating the relationship of pregnancy to oral disorders.

The Dean of this Faculty has served for two years as chairman of the Council on Dental Education, Canadian Dental Association. During the past year that council published a booklet setting forth "The Requirements for Approval of a Dental School". Many other matters pertaining to the training of dentists and auxiliary personnel are being considered.

During the year this Faculty was divided into four departments, as follows: Oral Surgery, Operative Dentistry, Prosthetic Dentistry, and Periodontia and Orthodontia. The curriculum has been revised to conform more closely to modern trends in dental teaching. The Faculty approves of the move towards more cultural education suggested by the Senate, and for this reason, the pre-dental courses in the Faculty of Arts and Science now provide for options, instead of the former rigidity. The Faculty is in sympathy with the course in anthropology suggested by Dr. Shaner. As time goes on we hope that more provision may be made for students to develop their talents in art, music, literature, etc.

Through the kindness of the Alberta Dental Association, funds have been provided for the purchase of photographic equipment. Mr. Harold Helm, a second year student, has made a great contribution towards the arrangement of equipment and the taking of black and white as well as colored still and motion pictures for clinical teaching.

The total enrolment in the Faculty during this session was 124, of which 20 graduated. A large number of applications have been received for admission next session. These have come from many parts of this continent, as well as from overseas.

### **Report of Dean M. E. LaZerte of the Faculty of Education**

#### *Enrolment*

The number of men enrolled, 568, as compared with 503 women, is relatively high, this being explained probably for two facts: first, there are many student veterans in teacher-training classes, and, second, the increased prestige of teacher-training when placed on University basis.

The 1948 summer session enrolment in the Faculty of Education was 1314. The graduate student group is large and increasing. Thirty-five students were registered in graduate courses and 32 of them were preparing theses that require much staff time for supervision.

#### *Staff*

The Faculty of Education staff now totals 29, 20 at Edmonton and 9 at Calgary—one staff member for each 36 students. Staff duties in the Faculty include much student guidance and consultation and the supervision of the practice teaching of over 500 students, over 200 of whom while teaching in rural schools were visited by staff members.

Staff members work in close liaison with the Department of Education, serving for the Department on curriculum committees and examination boards. They last year supervised eight major investigations on problems proposed for study by the High School and University Matriculation Examinations Board.



## *Trends*

Student interest is swinging gradually from the one-year to larger programs of training. The teacher shortage in the secondary schools is practically ended, but several hundred teachers are required for elementary schools, these being mainly rural. The Faculty of Education must, while emphasizing degree programs, provide an adequate supply of teachers for grades 1 to 9. The B.Ed. program for elementary grade teachers is now being studied by a special committee of Faculty; proposals for revision will likely come to Faculty Council early next session.

Increasing emphasis is being placed on practice teaching in rural schools similar to those in which graduates will begin their teaching. Forty-two rural school demonstrators co-operated with the Faculty of Education last year.

Members of the staff are interested in continuing their own studies. During the summer of 1948 eight members of the Education staff were registered for post-graduate study in United States universities. One staff member who was on leave of absence will be returning for full-time duty at the beginning of the next session.

## *Co-operation of Institute of Technology and Art, and of Faculty of Arts and Science*

The Faculty of Education is very appreciative of the splendid co-operation given by the Faculty of Arts and Science and by the Institute of Technology and Art at Calgary. The Faculty of Arts and Science provides the general options of the first two years, and the Institute provides the courses in Industrial Arts that form the major part of the B.Ed. in Industrial Arts program.

## **Report of Professor A. L. Doucette, Director of the Calgary Branch, Faculty of Education**

### *Physical Plant*

The completion of the physics and science laboratories in the remodelled building to the west of the main education building has permitted the offering of Arts options in the first two years of the Bachelor of Education programme, and in the first three years of the Bachelor of Education programme in Industrial Arts. The laboratories and lecture rooms in the science building are attractive and well equipped for the work at the Calgary Branch.

### *Liaison with the University Departments in Edmonton*

Constant liaison is maintained between the Arts professors and the heads of their departments in Edmonton.

Liaison is also maintained between the Director of the Calgary Branch and the Dean of the Faculty of Education, the Dean of the Faculty of Arts and Science, and the general administrative staff of the University in Edmonton.

### *Student Activities*

The student activities in Calgary are, on a smaller scale, representative of those on the Edmonton campus. There is an endeavour on the part of the students and staff to build up a University atmosphere at the Calgary Branch. An effort is made, although not altogether a simple matter, to have students sense that they are a part of the parent university organization in Edmonton.

### *Closing Exercises*

Closing exercises were held on April the eighth. This event is a very important one in the lives of the students, because at the Calgary Branch there is no Convocation ceremony for them to enjoy. The closing exercises therefore give answer to a felt need. This year Mr. James Mahaffy, K.C., an alumnus of the University of Alberta, was the guest speaker.

### *The Programme of Teacher Training*

It is now a very satisfactory administrative arrangement to be able to offer the complete programme of the first two years of the Bachelor of Education course and the first three years of the Bachelor of Education in Industrial Arts at the Calgary Branch.

### *Extension Work*

In addition to teaching, the staff members of the Calgary Branch devote considerable time to extension work in Calgary and in rural areas. Several members gave addresses at Teachers' Conventions, at Home and School Association meetings, at graduation exercises, on the radio, and to High School students contemplating a pursuance of their studies at the University.

### *Staff Load in Education Faculty*

The teaching load in education is generally far heavier than normal, which directly limits wide professional reading, professional writing, and graduate study.

### **Report of Dean R. M. Hardy of the Faculty of Engineering**

The crest of the wave of student veterans reached the third and fourth years this session. The total registration in the Faculty, 927, was down only 5% from the record registration during the session 1947-48. Consequently, with the excessively large classes in the two final years and the total in the Faculty so large, the present session constituted the peak of our post-war congestion. However, despite the limitations of space and senior staff, the major problem of providing adequate undergraduate instruction was successfully solved. Of particular interest from the teaching point of view was the effectiveness of the project method of teaching as practised in the final year of Mining Engineering. The experience of this session has shown it to be equally effective with large classes of students as with small classes provided the class attitude is as good as it has been with the large classes of student veterans.

The demand for post-graduate instruction was again high in the Departments of Civil and Electrical Engineering. It was only by offering work at the graduate level that adequate junior staff could be attracted to these Departments.

Research activities in the Department of Chemical Engineering were somewhat curtailed during this session because of heavy teaching loads and the necessity for the staff to devote considerable time to the task of equipping new laboratories. However, two major research projects were completed, one of which is of considerable interest to the petroleum industry. Current research work includes investigation of the non-Newtonian fluids and of two phase air-water systems in vertical pipes.

In the Department of Electrical Engineering the major research project concerned the electrical aspects of the application of the process of electrosmosis to problems of drainage, stabilization and control of seepage water in soils.



In the Department of Civil Engineering the equivalent of about nine full-time men were engaged on research projects. The majority of these were serving part-time as junior members of the staff. Problems under investigation included the durability of concrete with particular references to its use for pavements on the City of Edmonton streets, the measurement of bond stresses in reinforced concrete, the physical characteristics of McMurray tar sands in relation to construction problems encountered at the Bitumont pilot plant, and the application of the process of electrosmosis to drainage problems in soils. In addition the Department continued the highway research project under the auspices of the Alberta Research Council and also the rural sanitary facilities project under the auspices of the Prairie Rural Housing Committee. The significant factor of the work in connection with concrete and soils which is being carried on in the Department of Civil Engineering is the fact that a large number of both public and private organizations are actively supporting the project. In addition to the Alberta and National Research Councils and the Prairie Road Builders Association, the Alberta Transit Mix Concrete Company and the Master Builders Company of Canada Ltd. are all making financial contributions to these programs.

Instruction in the new courses in Petroleum and Irrigation Engineering was started during this session. Very enthusiastic and active support is being received from the petroleum industry for the Petroleum Engineering work. A financial grant of \$25,000 to be spent over a five year period has been made by the Imperial Oil Limited for specialized equipment in Petroleum Engineering. Some special equipment purchased from this grant was installed during the present session.

The Department of Chemical Engineering, in co-operation with the Department of Extension, is conducting a "Mud" School as an extension service to the petroleum industry. It consists of a short course on the principles and practice of the handling and control of drilling fluid as employed in the drilling of gas and oil wells. It is expected that further extension courses will be offered to the petroleum industry in due course.

The Department of Civil Engineering was fortunate in securing the services of an outstanding irrigation engineer who has had twenty-five years experience in irrigation work in the Punjab.

Employment opportunities for engineering graduates have been reasonably good again this year. It appears however that the employment situation for Alberta graduates has been somewhat better than has existed at some other Canadian universities. No great difficulty has been experienced in placing the very large graduating class of this session providing a graduate did not impose limitations as to location and type of work he was willing to accept.

A committee of the Association of Professional Engineers of Alberta examined the facilities of the Faculty in reference to their adequacy to meet the needs of the student enrolment to be expected following the peak post-war classes. The best available evidence indicates that the total registration in engineering will level off at a considerably larger total number of students than were in attendance during the 1930's. The Association Committee also noted that the facilities available for engineering at this University were considerably less than at any other of the Universities of Western Canada. Representations were made to the Board of Governors and the Provincial Government officials calling attention to these facts.

## **Report of Dean W. F. Bowker of the Faculty of Law**

This year's registration of 112 is the largest in the history of the Faculty, the former record being 76 students in 1947-48. It is expected that there will be 135 to 140 next session. Although the wave of veterans is passing the peak, it is expected that the number of students entering the Faculty each year will be stabilized at around 30 or 40, which is twice the number that entered the Faculty each year at the start of the war.

Our reading room space and library facilities are such that we can accommodate 135 to 140 students next year. This means that the number admitted to first year should be held to 50, in round numbers. The Faculty wants to avoid the fixing of a quota. No student in the combined course and no holder of a B.A. residing in Alberta has been or will be refused admission, but it has become necessary to exercise discretion in the case of applicants with degrees other than B.A., or who do not want to enter the practice of law, or who reside in other provinces.

### *Employment of Graduates*

This problem is closely linked to that of enrolment in the other law schools. At present the situation is this. For over two years there has been a very serious shortage of graduates in Alberta. Most firms are expanding. Many country solicitors want to retire. Business firms such as oil and trust companies want more lawyers, and likewise the Governments, both Provincial and Dominion. The number of students who will have been graduated from this faculty between 1945 and 1949, both years inclusive, is only 52. In contrast to this, the enrolment in all the other law schools has expanded tremendously since the war. In 1948 alone, the law schools in the other western provinces graduated a total of some 200 students and will graduate a like number in 1949. Osgoode Hall, in Ontario, graduated some 200 in 1948 and there will be a like number in 1949. The figure for Dalhousie in each of these two years is about 50. The consequence is that every province except Alberta has or soon will have more new graduates than it can absorb. The obvious result is that a movement into Alberta has already begun. Neither this Faculty nor the Law Society of Alberta objects in principle to the interchange of graduates, but in the other provinces the minimum length of the course is shorter than ours and the period of one year's articling can be put in before graduation, which is not permitted here. The result has been that our efforts to raise the standard of education are being jeopardized by the movement from outside, and at the expense of our own students. The Law Society recently took steps to prevent this discrimination against our own students. When our first large class graduates in 1950, the present serious shortage will be relieved and at the same time I see no danger that our output of graduates in the coming years will not be absorbed.

### *Staff*

For the second year in succession there have been three full-time members of the staff. This has been very satisfactory. At the same time the Faculty continues to be under great obligation to the practising lawyers who teach courses that are best given by men in actual practice.

The University has engaged a fourth full-time member for 1949-50. This will enable the Faculty to offer every course every year instead of combining many

courses for second and third years and presenting them in alternate sessions. This was necessary with the small staff, but becomes unsatisfactory as enrolment increases.

### *Curriculum*

For several years the Faculty has studied the question of curriculum. Now that the staff has been increased to four it should be possible within a year or so to revise the curriculum in accordance with the principle recently laid down by the Senate, viz., to increase and improve the teaching of fundamentals instead of trying to give detailed instruction in every phase of every specialized subject and at the same time to increase the emphasis on public law (legislation and administrative law), which has become of increasing importance.

### *Graduate Study*

For the first time in a number of years no student is carrying on postgraduate work. This situation is doubtless temporary.

### *Law Society of Alberta*

The relations between the Faculty and the Law Society continues to be of the best. The members of the Faculty keep in close contact with the practising barristers. Every effort is made to place students with firms who want a student, and our unofficial placement service has worked very well, except for the fact of shortage of graduates. It is gratifying to have on the Law Faculty Council, Mr. Justice Frank Ford, former Chancellor of the University, Mr. G. H. Steer, K.C., formerly Acting Dean, Mr. S. H. McCuaig, K.C., who is this year President of the Canadian Bar Association, Mr. L. Y. Cairns, K.C., and Mr. R. Martland, K.C.

The Law Society has always been generous in making available the Court House Library for our students. Were this not available the crowding of our own reading rooms would be much more serious than it is.

### *Research*

It has still been impossible for the members of the staff to engage in writing because of the burden of teaching. However, by another year or so, it is expected that all members of the staff will be able to contribute to legal periodicals.

### *Conclusion*

The co-operation received from the staff is of the highest and the work and morale of the students continues to be excellent.

## **Report of Dean J. W. Scott of the Faculty of Medicine**

The revision of the curriculum as introduced a year ago, with the elimination of the undergraduate interne year and the granting of a degree at the end of four years, is now in effect in all four academic years and is proving satisfactory.

There is still a great demand for admission to the first year. Preference has been given to applications from veterans and previously deferred candidates who fulfil the admission requirements. With the incoming Freshmen class next September, the demand for admission by veterans will have almost ceased. There are at present 226 students registered in the Faculty.

The Faculty made arrangements by which displaced physicians could establish the validity of their credentials and proceed to certification. Two of these physicians entered the Faculty as partial students.

### *Preclinical Departments*

The increased space provided by the extension of the East and West Wings of the Medical Building has provided laboratory space which has facilitated the teaching and research activities of Anatomy, Physiology and Pharmacology, Biochemistry, Pathology, and Bacteriology. All the departments carry on active teaching programs, both to medical and non-medical students.

Research projects are being actively pursued in all of these departments by members of the staff and by graduate students under staff direction. The Faculty of Medicine is appreciative of the valuable support given to medical research by the fund made available by the Board of Governors. Additional financial support has been received as grants-in-aid and medical research fellowships from the National Research Council, the National Cancer Institute, and the College of Physicians and Surgeons of Alberta.

### *Clinical Departments*

The greater part of clinical teaching, both undergraduate and graduate, in the departments of Medicine, Surgery, Obstetrics and Gynecology, Ophthalmology and Rhino-oto-laryngology, is carried out at the University Hospital. It is anticipated that the new addition to the hospital, now under construction, will provide improved teaching and research facilities in all the clinical departments.

With the new curriculum, there has been an increase in the amount of teaching done at the Royal Alexandra Hospital, and we are indebted to the administration and staff of this hospital for their co-operation.

Research activity in the clinical branches of medicine has been hindered from lack of laboratory space. A research laboratory for the investigation of problems in Steroid Metabolism under Dr. D. R. Wilson has been equipped and staffed by the University Hospital during the present session. Dr. Wilson, who had the signal honor of being selected as Markle Scholar for Canada a few months ago, will in this capacity devote most of his time to clinical research activity in this field.

### *Graduate Teaching*

The annual Refresher Course was held in May, 1948, with an attendance of 195 doctors from Western Canada. Many members of the Faculty participated in the program.

There are registered in the five-year graduate training course 19 trainees. This program is making it possible for graduates of this and other schools to complete their training for specialist qualification in nearly every branch of medicine.

The Faculty of Medicine, since it graduated the first class 25 years ago, has trained 708 doctors of medicine (not including the 34 prospective graduates this year), of whom about one-third are practising in the Province of Alberta, and many others are at present taking post-graduate training with the intention of returning to practise their specialty in Alberta.

### **Report of Professor Helen E. Penhale, Director of the School of Nursing**

To measure a year's achievement in terms of the year's goals sometimes fails to show the actual accomplishments. It was the sincere hope of the School of Nursing one year ago that a sufficiently stable staff was available to proceed rapidly with major curriculum revision. This goal has not been reached. The achievements for the year must be measured in terms of other attainments.



The road ahead for the student in nursing is made more arduous by the very nature of the responsibilities she faces. A definite attempt to help each student has been made through the establishment of a guidance program. While this seems a new venture in nursing, the literature reveals that as far back as 1901 nurses possessed this philosophy, a faith in individual worth, acceptance of and belief in the individual. The purpose of the guidance program as established in the School of Nursing is to foster better adjustment of the individual nurse with maximum growth, personally, professionally, and socially. This broader aspect of education, helping individuals to use all their powers and capabilities in meeting problems of life and in adjusting to changing conditions, has been integrated throughout the entire curriculum.

The affiliation program has been revised. Each student receives a period of carefully controlled experience in the field of Public Health. The Out-Door, Venereal Disease and Mental Health Clinics, the Edmonton Rural Health Unit and the various health workers in Edmonton contribute to the educational program offered the student. On March 1 an affiliation in pediatric nursing was started at the Royal Alexandra Hospital. This experience is available to two students at a time and extends over a four-week period. Students registered at the School of Nursing, Royal Alexandra Hospital, are now affiliating with the School in orthopedic nursing.

Methods of teaching have been improved. Audio-visual instruction became possible through the addition of microscopes and a projector and screen. Objects, specimens, models and slides have been secured.

The services of the library staff on the campus are now available to the School of Nursing. Following the cataloguing of the library, a large number of supplementary texts, reference books and periodicals were purchased. It has been gratifying to observe the continued increase in the use of the library by the undergraduate students and by graduate nurses stationed at distant points throughout the province.

The so-called extra-curricular activities make a real contribution to the students' social growth. The Macleod Club has been reorganized as a student-faculty organization. Through this, the students take an active part in plans to establish and maintain happy and constructive relationships in student life. Some of the activities of the Club have been the preparation of a student handbook, the organization of a fiction and record album library, and informal parties of an educational as well as a social nature.

The School continues in its efforts to meet the needs of nurses and nursing. Five courses—the five-year course leading to the degree, Bachelor of Science in Nursing; the three-year course leading to the Diploma in Nursing; the one-year diploma courses in Public Health Nursing and in Teaching and Supervision in Schools of Nursing; and the four-month certificate course in Advanced Practical Obstetrics were again conducted. Two refresher courses were offered—one in Ward Management, the other in Child Care and Development. Nurses from forty-two hospitals and from sixty public health nursing districts and health units attended the refresher courses. Last summer, for the first time, the School of Nursing offered a course in Home Nursing to the Farm Young People. During the winter a similar course was conducted by the staff under the auspices of the Canadian

Red Cross Society. Further publicity was given to nursing through two radio broadcasts presented by the staff.

More assistance was made available to the Schools of Nursing throughout the province. Regulations Governing Schools of Nursing and Regulations Governing Nurse Registration Examinations have been put into effect. Each of the eleven Schools of Nursing will be visited during the coming months in order to give added assistance. The course in Tuberculosis Nursing offered at the Central Alberta Sanatorium was approved and is now being used as an affiliation to supplement the experience of those students registered in Schools of Nursing connected with smaller hospitals.

The School of Nursing was chosen to participate in the nursing education fellowship program for Canadian graduate nurses. The purpose of this program, made available through the W. K. Kellogg Foundation, is to strengthen nursing education programs in Canadian universities. It will help to provide more adequately prepared instructors for basic and advanced nursing education curricula. One member of the staff has been studying at Wayne University during the past year. Four additional members were given a six weeks' travelling fellowship to visit American university schools of nursing and hospitals. The Director spent a considerable period of time just prior to the opening of the present session and during the Christmas vacation visiting schools of nursing in eastern and central United States and Canada. The fellowships have been made available for the purpose of improvement in the basic educational program in nursing.

Through the added assistance and interest in the Kellogg Foundation in the School it is hoped that plans for the revision of the five-year degree program may soon be started.

## **Report of the Director of the School of Pharmacy**

### *Academic*

Owing to the large number of applications it was again necessary to impose a quota of fifty in the first year of the course. The university approved the recommendations of the Alberta Pharmaceutical Association that in future entrance requirements be: (a) a 60 per cent average in the required courses of Grade XII; (b) eighteen months of apprenticeship (but fourteen months for the 1949-50 session).

Four graduate students continued work towards M.Sc. degrees in the department. One of these was graduated at Spring Convocation.

### *Research*

Work was continued on the revision of the external preparations of the Canadian Formulary. Many preparations were formulated and tested. On the basis of the work of the last three years, it has been possible to make specific recommendations to the editorial board, and it is expected that the revised edition of the Formulary will be published shortly.

A sensitive photofluorometric test for estrogens has been developed and successfully applied to the assay of certain commercial preparations.

A number of organic compounds related to carcinogens has been synthesized and tested for estrogenic potency.

The action of a number of hypnotics, analeptics and antihistaminics on the response of striated muscle to nerve stimulation has been investigated.



A number of shorter projects were also undertaken: the effect of sex hormones on the hair growth of rats; a comparison of two techniques of arsenic assay; the compatibility of iron and thiamin at low pH; the effect of certain chemicals as protective agents in ultra-violet irradiation; the adaptation of the centrifuge to the determination of emulsion stability; the effect of certain agents on the surface tension of water.

This Department co-operated with the Department of Zoology on research aimed at the control of tapeworm in fish.

An investigation of the effect of certain drugs on learning in rats was undertaken with the assistance of the Department of Psychology.

#### *Extension*

The School of Pharmacy organized a two-day Refresher Course in conjunction with the annual meeting of the Alberta Pharmaceutical Association. A meeting was sponsored also on practical aspects of narcotic control.

Several extension bulletins covering recent advances in Pharmacy were sent to all practising pharmacists in the province. In addition, numerous inquiries about professional problems have been answered.

During the year staff members presented a number of papers to scientific and professional societies, service clubs and similar groups.

#### *New Quarters*

The Department of Pharmacy has moved from the Arts Building to new quarters in the Medical Building. Although the quarters are not complete, the work was sufficiently far advanced at the beginning of the New Year for partial occupancy. When the quarters are completed it is believed that they will be second to none in the country.

### **Report of Dean J. Macdonald, Chairman, School of Graduate Studies**

#### *Registration*

During the academic year, 1948-49, 227 students were registered in the School of Graduate Studies.

There is an over-all increase of 20 students this year over the number registered in 1947-48.

The distribution of candidates according to departments has been as follows:

Animal Science .....	2	Modern Languages and Classics...	6
Botany .....	1	Pharmacy .....	4
Biochemistry .....	6	Philosophy and Psychology .....	17
Chemistry .....	7	Physics .....	3
Dairying .....	3	Plant Science .....	3
Education .....	77	Political Economy .....	5
English .....	7	Soils .....	1
Entomology .....	3	Zoology .....	2
Engineering .....	23	Physiology .....	1
Geology .....	8	Special Grads .....	38
History .....	9		
Mathematics .....	1		227

#### *Progress During Session*

Two points of interest should be noted here. First, as forecast in my report last session, the School took up the question of reinstating the thesis re-

quirement for the M.Ed. degree and decided unanimously to recommend that the thesis be required. The M.Ed. program was therefore modified in order to bring it into line with other master's programs. Second, the School dealt with an application from a candidate for the Ph.D. in Biochemistry. After carefully scrutinizing the application to determine whether it conformed with our regulations, the School decided to recommend the acceptance of that candidate. This is the first application that the School has entertained and approved.

### *Recommendations for Degrees*

The number of students recommended for Master's degrees are as follows:

M.A. ....	7	M.Sc. (Eng.) ....	6
M.Sc. ....	8	M.Ed. ....	13
M.Sc. (Agr.) ....	3		

### **Report of the Librarian, Miss Marjorie Sherlock**

Library activity for the year 1948-49 was on much the same level as in 1947-48 with a total circulation of 195,867 volumes. Attendance in the Library Study Rooms in the evenings totalled 108,191. No record was kept of the daytime use of the various reading rooms, but they were filled to capacity throughout the day.

#### *Staff*

The staff of the Library consisted of twenty-one full-time members (nine of whom were professional librarians) and four part-time assistants.

Thirty-three student assistants were employed in the Library for varying periods weekly, supervising the two Library Study Rooms and assisting at the Circulation desks during rush periods. In employing these students particular effort is made to advise and encourage those who intend to enter the library profession. Five of our assistants, graduating this spring, are already enrolled for the fall term at library schools, and will help to relieve the present acute shortage of trained librarians in Canada.

#### *Quarters*

The problem of space for readers and books remains as acute as ever, and it has been necessary to continue to place less-used volumes in dead storage till the new library is ready.

On November 25, 1948, the Hon. John Campbell Bowen, Lieutenant Governor of the Province, laid the cornerstone of the new library building, which will be called the Rutherford Library in honor of the Hon. Alexander Cameron Rutherford, first Premier of Alberta and author of the original Act establishing the University. Work has continued on the building all through the winter, but owing to delay in the delivery of steel in the summer of 1948, the building will not be completed until the summer of 1950, instead of the fall of 1949 as originally anticipated.

#### *Cataloguing and Orders*

This has been another record year for this Department with nearly 10,000 volumes added to the collection. This Department consisted of the Chief Cataloguer, the Order Librarian, and four full-time assistants. The Chief Cataloguer again spent two months of the summer in Calgary where she completed the re-cataloguing of the Education Library, begun in the summer of 1946.

During the year the Department ordered 4,808 titles; accessioned 6,781 volumes; catalogued 9,856 volumes (including 1,170 bound journals); lettered 7,378 volumes; withdrew 223 volumes; and typed 28,637 cards. The Department continued to order and catalogue books for the University Hospital Nursing Library on a cost basis.

#### *Reference, Circulation and Periodicals*

Although total circulation statistics for the Main Library were slightly down from those of 1947-48, there was no lessening of the activities of this Department, owing to the noticeable increase in the use of books and other materials from the stacks as opposed to reserve shelf books, and to the demand for reference and inter-library loan service. This would indicate that graduates and senior students were making greater use of the Library than heretofore, as was to be expected as the large post-war classes progress to their senior years. The staff consisted of the Reference Librarian, the Circulation Librarian, 4 full-time and one half-time assistants, a delivery boy, and 7 student assistants.

The Main Reading Room was filled continuously throughout the day-time hours of opening (7:45 a.m.-5:30 p.m.) and 13,473 readers used it during the evening hours (7-10 p.m.).

The Library Study Room, open for use at all hours, was used by 37,676 readers during supervised periods (9 a.m. to 4:30 p.m. daily).

#### *Reference, Periodicals and Binding*

This Department is responsible for reference service to faculty members and students, for periodicals, government documents and pamphlet material, for inter-library loan service, and for the binding of books and journals for the entire University Library. During the year 1,032 current periodicals were ordered and recorded (an increase of 77 over the previous year) and 2,253 volumes were prepared for binding, as compared with 1,851 in 1947-48. Inter-library loans increased again over the previous year, with 141 items borrowed for staff members, and 84 volumes loaned to other libraries. Fourteen microfilms were purchased for those engaged in research.

During the year the circulation from the Main Library was 76,219, which includes: books and journals from the stacks, 20,034; books from the reserve shelves, 50,841; special pamphlets, periodicals, etc., 5,344. On extramural loan 840 books were sent out to 369 registered borrowers.

#### *Branch Libraries*

*Education Library* (Edmonton)—During 1948-49, the Education Librarian, with two full-time and two student assistants, circulated 52,154 volumes. Both the Education Library and the Library Study Room were used to capacity. The latter was open until 10:30 each evening, although supervised only 5 hours a day. During the supervised hours 20,766 students made use of it. Extramural loan service was heavier this year than the preceding year, with 559 books sent out by mail.

*Education Library* (Calgary)—The introduction of the Arts options into the Calgary Branch of the Faculty of Education has changed the emphasis of this library somewhat. Originally it served Normal School students only, and the book collection was strictly along teacher-training lines. The collection has now

been broadened and increased with the addition of a basic Reference collection, and texts and reference books in English, French, History, Mathematics, Physics and Chemistry. This, along with the completion this year of the recataloguing of the collection, has given the library its greatest service capacity in its history. At present this library subscribes to 36 periodicals for Education and 13 for Arts, and receives 10 other publications as gifts.

During the year 1948-49 the librarian in charge, with a half-time assistant, circulated a total of 8,636 volumes or an approximate daily average of 136 volumes. Total number of readers using the Reading Room was 11,904, about 150 students daily.

*Medical Library*—This branch library again showed an increase in circulation and attendance over the preceding year. The staff consisted of the Medical Librarian, a qualified library assistant half-time, a clerical assistant half-time, and 4 student assistants. The library was open 12¼ hours daily except Saturday. The lengthening of the academic year in the Faculty of Medicine has involved a corresponding increase of nearly three months in the period during which full library service is provided to staff and students.

Circulation statistics for the year are: reserve books for daytime use in the library, 4,450; reserve books for overnight use, 6,089; journals and pamphlet material, 4,176; a total of 16,824. This is an increase of 17 per cent over last year's total. Items totalling 2,920 were loaned to city and rural doctors.

Current subscriptions to medical journals now number 255, of which 18 were new last year, and 282 bound journals were added to the collection. On inter-library loan 41 items were borrowed and 45 loaned to other libraries. During the past two years 1,169 items, unwanted duplicates in our collection, were sent to other libraries for which we received in exchange 1,773 items needed to complete our sets of bound journals.

*Law Library*—The increased registration in the Faculty of Law put a very heavy strain on the Law Library. Even with the additional reading room added last year it was not possible to accommodate all the students, and we are very grateful to the Law Society of Alberta for permitting our students to use its library in the Court House.

The work of binding or rebinding hundreds of volumes in the collection, and the purchase of new books and sets to bring out Law collection up to date was continued during the year.

*Agriculture Reading Room*—During the past year the Agriculture Reading Room was open from 9:00 a.m. to 5:00 p.m. under the supervision of a full-time library assistant and from 6:30-9:30 p.m. with a student assistant in charge, with a marked increase in service and satisfaction. This past year 12,587 students used the reading room, as compared with 9,179 in 1947-48, and 4,399 books were circulated.

*Chemistry and Nursing Reading Rooms*, each seating about 20 readers, were used to capacity during the session. No statistics are kept for the latter, but in the Chemistry Reading Room the number of readers totalled 9,801, and the circulation 32,195. In the Mining Reading Room, a half-time library assistant was employed. During the year she completed the card catalogue for the collection and was able to provide reference service for students and staff. The number of readers during

the year was only 198, since there is very little reading space; the circulation was 1,680 volumes.

### *Stock of Books*

During the year 3,931 titles were added by purchase and 295 by gift, making, with bound journals, a total of 10,390 volumes; 223 volumes were withdrawn, giving us 99,750 accessioned volumes. In addition there are 13,091 accessioned volumes in the Education Library (Calgary) and some 13,000 volumes as yet unaccessioned in the Education Library (Edmonton), making a total bookstock in the University Library system of approximately 125,821 volumes at March 31, 1949.

### *Radio Talks*

During the past winter 18 book talks were given by members of the University Library in the weekly series Books at Random, presented over CKUA in co-operation with the Extension Library staff. This is the fourth season for this series.

### *Library Course for Teachers*

During the summer session, 1948, a course in Library Science for teachers was offered for the second time by the Faculty of Education, in co-operation with the University Library. This course is designed to provide the fundamentals of book selection and library administration for teachers in charge of small school libraries, and has proved most acceptable. Miss Louise Riley, of the Calgary Public Library, was the instructor in charge of the course, assisted by Miss Susan Cooper, Edmonton Public Library, and Miss Emily Clever, University Library.

## **Report of the Provost, Professor H. T. Sparby**

Student government has been well sustained during the 1948-49 University year. Mr. Bernard J. Bowlen, President of the Students' Union, and all the members of his Council have devoted themselves wholeheartedly to the direction of student affairs. They have been notably successful in maintaining at a high level the enviable record which the University enjoys in the field of student administration.

Several amendments were made during the past year to the constitution of the Students' Union. Two of the most noteworthy of these were an act to provide a constitution for the Calgary Branch of the Students' Union and an act setting up a student organization to promote public relations.

It is expected that the funds available for the support of student activities on the campus will decrease somewhat during the next few years because of an anticipated recession from the high enrolment figures of the immediate post-war years. Because of this, the Students' Council took steps this year to clarify its position with respect to the amount of financial support which it is prepared to offer to campus clubs. In an amendment to the constitution of the Students' Union, a policy regarding this matter is clearly stated. The only clubs entitled to receive financial assistance are called "University Clubs". These are defined as "clubs which promote cultural activities that benefit the student body as a whole, and whose work is of a standard to reflect credit on the University".

In the field of student publications, the first issue of a new literary magazine called "Stet" appeared late in the 1947-48 term. During 1948-49 two additional issues were published and it is hoped that next year the magazine will become a



quarterly. The underlying purpose of this new publication is to encourage and provide a suitable outlet for creative writing among the students. Judging from the quality of the contributions to the first three issues, it would appear that a good start has been made.

The usual number of student social functions were held during the past year. On the whole, these affairs are carefully organized by student committees, usually under the very capable supervision of Miss M. Simpson, Adviser to Women Students, and are well supported by the student body. Miss Simpson and the Provost attend all the major functions and most of the smaller ones as guests of the sponsoring student organizations. An interesting experiment was carried out this year in an attempt to reduce the number of formal dances. Instead of the usual separate Freshman, Sophomore and Junior formals, one large dance, called the "Undergrad" was held. This combined function was quite successful, although it was felt by many students that it lacked the distinctive characteristics which are typical of the separate class dances. For this reason, it is likely that the separate functions will be revived again next year.

Life in the three University residences continues to play an important part in the educative experiences of the students who are fortunate enough to be accommodated here. Under the able supervision of Miss M. Simpson, Warden of Pembina Hall, Dr. D. Healy, Warden of Athabasca Hall, and Mr. E. Shortliffe, Warden of Assiniboia Hall, assisted in no small measure by Mr. R. Lister, superintendent of residences, no serious problems have arisen in any of the residences during 1948-49. Student house committees, under the chairmanship of Mr. A. Armstrong and Miss B. Walker, handled effectively the few minor problems that did occur and also directed efficiently the numerous regular activities that make up a large part of residence life.

The Mixed Chorus is rapidly becoming an institution at the University of Alberta, and the large, appreciative audiences that heard the annual concert this year are agreed that the high standards set by the Chorus when it was first organized a few years ago are being well maintained. The Symphony Orchestra, too, presented two very enjoyable evenings of music open to the public late in January. The most outstanding effort of the Dramatic Society during 1948-49 was the production of Shakespeare's *Romeo and Juliet*. The play was well received by capacity audiences and made a worth while contribution to the cultural life of the campus.

Disciplinary problems occupied only a minor part of the Provost's time during the past year. In general, student behavior on the University of Alberta campus is of a high order. The co-operative attitude of the Students' Council and of other student organizations and the willingness of individual students to assist in every way have prevented any of the few problems that did arise from growing to major proportions.

### **Report of the Chairman of the Committee on Physical Education**

Intra-mural sporting activities, which make up the greater part of the second year curriculum in the Department of Physical Education, have progressed very satisfactorily and most students are quite enthusiastic with this part of their work. Inter-faculty sports are also being enthusiastically endorsed, and it is regretted that many minor injuries are resulting from this type of enterprise.



The Committee on Physical Education regrets the necessity of postponing the initiation of the degree course in Physical Education. It is felt that this course should be commenced at the earliest possible moment.

### **Report of the Director of Medical Service, Dr. J. W. Scott**

The health of the students during the past year has been good and we have been free from any major epidemics. During the early part of 1949 there was a minor epidemic of influenza associated with respiratory infection which necessitated a good deal of laboratory investigation, including x-ray. Most of these patients were hospitalized in the Infirmary. A few, however, with pneumonia were taken care of in the University Hospital.

We had more than the usual number of acute appendicitis cases this year. The actual number requiring operation was seventeen. There were no major accidents of a serious nature. The number of accidents sustained in athletics was somewhat less than last year.

Our costs of operating are mounting each year due to the increased cost of medical supplies for use at the Infirmary, the increased cost of special investigation such as x-ray and other laboratory tests, and the increased cost of hospitalization. The total amount paid to the University Hospital for patients hospitalized was about \$3,900, and the total amount paid for x-ray investigation for diagnosis was over \$2,000.

Because of the large number of cases of acute appendicitis requiring hospitalization and surgical care, our expenses have increased above the average in that regard in the present session. The total amount paid to surgeons not on the Medical Services staff was over \$2,000. Because of this increased expenditure it was deemed advisable to increase the medical service fee from six to seven dollars per session. It is possible that a further increase will be necessary next year.

Problems in mental adjustment to study have been seen more frequently this year than usual. This phase of the Student Health Services requires patient and time-consuming investigation in order to help this group. This type of tension state has been seen more frequently within the last few weeks preceding examinations and has necessitated at least thirty students writing deferred final examinations. In the investigation of problems of this kind, we have had valuable help from Dr. S. S. Spaner, acting psychiatrist to the University Hospital.

One would like to point out that year by year we are giving increased health services to the students. For instance, the immunization of medical students and B.Sc. nurses against tuberculosis, which was begun a year ago, has been continued. This necessitates careful supervision of the students and a number of x-ray films. The Provincial Department of Health gives us a very low rate on the x-ray work.

Dr. J. F. Elliott has continued to act in a very efficient capacity as Resident Physician. Miss R. Revell has given invaluable service as Matron at the Infirmary, assisted by two full-time and one part-time registered nurse.

The medical staff of the Student Health Services would like to express their appreciation to Dr. P. S. Warren, chairman of the Student Health Services Committee, for his keen interest and wise advice in the Student Health Services activities.

## **Report of the Commanding Officer, University of Alberta Canadian Officers Training Corps, Lt.-Col. D. M. Healy**

The Officers of the Contingent for the academic year were as follows: Commanding Officer, Lt. Col. D. M. Healy, M.B.E. (succeeding Lt. Col. M. L. Van Vliet); Contingent Officers, Major H. J. Bishop, Captain W. D. Smith, Captain J. K. Heath, M.C.; Resident Staff Officer, Major M. J. Egan.

The Honourable J. C. Bowen, Lieutenant Governor of the Province of Alberta, graciously consented to continue as Honorary Colonel of the Contingent.

Ninety-five Officer Cadets were on effective strength at the beginning of the year, on completion of the summer practical training. Of these, 77 commenced their next theoretical training phase, the remainder being struck off strength for the following reasons: 4 were commissioned as second lieutenant Active Force, 6 completed qualifications and were transferred to Supplementary Reserve, 2 were transferred to other universities, 2 failed the Practical Phase, 2 failed their academic year, and there were 2 voluntary withdrawals.

At the end of the academic year, the numbers of Officer Cadets qualified for commissioning and not returning to Corps Schools for further training were 6 qualified Captains and 22 qualified Lieutenants.

Thus of the former members of the Contingent 49 will attend another summer's training, 15 of these will be qualifying as Captains and 34 as Lieutenants.

In April, an additional 40 candidates were taken on strength and assigned to Corps. This will make a total of 89 from the Contingent attending summer training in 1949.

Eleven of the qualified officer cadets have been selected for employment with the Active Force on instructional and administrative duties during the summer of 1949.

Faculty members who lectured in Military Science during the year were: Military Geography, Dr. P. S. Warren; Military History, Dr. D. E. Smith; Economics of Defence, Professor A. Stewart and Mr. E. J. Hanson.

The activities of the Contingent included the renewal of the practice of parading a Guard of Honour for His Honour the Lieutenant Governor, at the opening of the Legislative Assembly. Approximately 60 officer cadets were turned out for this under the command of Captain J. K. Heath.

The Annual Ball of the C.O.T.C. was also revived this year, with the difference that it was a combined effort shared with the U.N.T.D. and the R.C.A.F. Training Flight. It was successful, though not as well attended as it would have been had it been held earlier than March.

A smoker was held for the Contingent in November and was well attended. A number of the senior staff officers from Headquarters Western Command were present.

The Commanding Officer and Contingent Officers were hosts at a dinner held in the King Edward Hotel in March. This was attended by His Honour the Lieutenant Governor, the General Officer Commanding Western Command, with some of his senior staff officers, former Commanding Officers of the Contingent, and representative faculty members.

The Orderly Room was housed after Christmas in temporary accommodation in the Drill Hall, pending completion of the more permanent accommodation which is to be shared with the R.C.A.F. Training Flight.

## **Report of the Commanding Officer, University Naval Training Division, Lieut. R. E. Phillips**

During the summer of 1948 sixteen students spent two weeks of Required Naval Training at the West Coast. The entire time was spent training in a ship while on a short coastal cruise. In addition to these students, eighteen spent from two and a half to five months at the Coast on Voluntary Service.

New instructions from Ottawa in the fall of 1948 led to several major changes in the U.N.T.D. organization. The rank of "Cadet R.C.N.(R)" was instituted and the old status "Officer Candidate" was abolished. Our students now hold the same rank as students at the Canadian Services Colleges at Kingston, Ontario, and Royal Roads, B.C. A Board to select Cadets from freshmen recruits is to be held prior to February 1st of their first academic year instead of during the second academic year. All Cadets are now required to spend two full summer vacation periods of required training instead of one. A new uniform for Cadets is to be provided but, at this date, has not been issued.

The quota for this Division has been reduced from 65 to 60. Eighteen new students were recruited in the fall of 1948. Of these, 13 passed the Selection Board held early in the new year. Two fourth-year Cadets were commissioned as Sub-Lieutenants during the session. One is still at University and has joined the Active Reserve. Several of last year's Cadets did not return to University in the fall of 1948, others could not fulfil the requirements for a commission by the time of graduation or found timetables of summer work conflicting with required training. This cut down the number on strength considerably. In April, 1948, there were 33 Cadets on strength. It is expected that all these Cadets will spend the summer at the West Coast training in ships and ashore.

## **Report of the Commanding Officer, R.C.A.F. University (Auxiliary) Flight, Squadron Leader L. E. Gads**

The R.C.A.F. (Auxiliary) University Flight was formed early in the fall of 1948 to provide a nucleus of trained reserve personnel. For administrative purposes, the parent Unit is the 418 (Tactical Bomber) Auxiliary Squadron, Edmonton.

The officer commanding, Squadron Leader Gads, relinquished his former duties as University liaison officer to Flight Lieutenant Gillmore, who became the resident staff officer and now carries on the duties of liaison officer.

There were over 50 applicants for enrolment in the fall, out of which 32 cadets were accepted after medical and other tests. The majority are engineering students, and the others include students in pre-medicine, education, law, etc. Of these cadets, 28 are expected to go to the Summer Camp at Abbotsford, B.C., and 2 are to be selected for flying training.

The programme for the year consisted of a series of two-hour lectures per week given by officers from North West Air Command and visiting officers from Headquarters. These lectures included such topics as history of the R.C.A.F., officers' duties and career possibilities, planning in R.C.A.F., etc. Films were shown explaining the role of air power, principles of flight, aerial photography, etc. A weekly summary of current events was presented and lively discussions followed.

The Summer Camp will be held from May 8 to June 26 at Abbotsford, B.C., where cadets from University Flights of the universities of British Columbia,

Alberta, Saskatchewan and Manitoba will gather for an officer indoctrination course. This course is intended to give potential officers the essentials of drill, basic knowledge of service administrative procedure, and some technical knowledge and practical experience in their chosen fields. Since the majority of the cadets are students in the faculties of engineering, their training and practical employment for the remainder of the summer is intended to be profitable both to them and to the R.C.A.F.

The Flight sponsored, jointly with the C.O.T.C. and U.N.T.D., a Services Ball held in the Prince of Wales Armouries. It is hoped that next year the second-year cadets, who have had the essentials of drill and an issue of uniform, will be able to participate in other extra-curricular functions such as Air Force Day, etc.

In addition to his administrative duties in the Flight, Flight Lieutenant Gillmore carries on the duties of liaison officer. This consists of contacting students interested in opportunities in the R.C.A.F. and summer employment of student-veterans. The majority of R.C.A.F. veterans who were employed by R.C.A.F. during the past summer are looking toward summer employment again.

Plans are drawn up for a joint C.O.T.C.-R.C.A.F. orderly room and officers' mess to be built as an annex to the Drill Hall. This will greatly facilitate the work of the Unit as Flight Lieutenant Gillmore has had to share quarters with C.U.R.M.A. and was unable to have his corporal clerk on the campus. Most of the clerical work had to be done at the 418 Squadron.

On the whole the morale of the Unit was high, attendance at lectures and interest were good, and the cadets are looking forward to an interesting and profitable summer.

### **Report of the Radio Secretary, Miss Margery W. MacKenzie**

The University of Alberta has continued to utilize approximately three hours a day, five days a week, of broadcasting time over CKUA. These times have included one hour in the early afternoon and two hours in the early evening. Two of the three hours each day have been devoted to the playing of recordings of good music. The third hour has included programs dealing with literature, drama, science, agriculture, household economics, educational research, adult education and world affairs.

During the past year members of the University of Alberta faculty have assumed responsibility for the broadcast of ten regular program-series, involving some 300 programs and representing a total of 75 hours of broadcasting. Of these 300 programs, 40 were broadcast from the campus studios and the remainder from the studios of CKUA in the Provincial Building.

As a convenience to broadcasters, 175 of the programs were transcribed at the University by the Radio Secretary and were presented from CKUA as recorded programs.

#### *Music Programs*

*Music Lovers' Corner*—Convener: Member of CKUA staff, 260 programs. This University program, broadcast from 1 to 2 in the afternoon, Monday through Friday, is for the present being arranged by one or more members of the CKUA staff.



*Music Hour*—Convener: Margery W. MacKenzie, 260 programs. Presented from 7 to 8 in the evening, Monday through Friday, this program features chamber music, choral and solo instrumental music, opera and symphony, in the first four programs of the week. The Friday evening program takes the form of a Listeners' Request Concert.

#### *Faculty Programs*

Of the ten programs convened by the faculty members of the University and broadcast over CKUA, all were fifteen-minute programs, and with the exception of the Alberta Farm and Home Forum, broadcast three times a week, and the Chimney Corner, broadcast twice a week, they were weekly programs.

*Alberta Farm and Home Forum*—Convener: E. B. Swindlehurst, Provincial Department of Agriculture, 150 programs. This series, presented jointly by the Provincial Department of Agriculture and the University of Alberta is broadcast three times a week, throughout the entire year, over CKUA in Edmonton and CJCJ in Calgary.

*Behind the Headlines*—Convener: C. S. Burchill, 20 programs. Members of the University faculty, as well as outstanding speakers visiting the city, contributed talks to this series of programs dealing with world affairs.

*Books at Random*—Convener: Flora Macleod, 23 programs. In this series, members of the staffs of the University and University Extension Libraries reviewed books of a widely varied nature which are obtainable at the University Extension Library.

*The Chimney Corner*—Convener: F. M. Salter, 48 programs. Comprising selected readings from the field of good literature this program series has been presented by members of the Department of English.

*Curtain Going Up*—Convener: Margery MacKenzie, 24 programs. This series featured mainly recordings and excerpts from plays of Shakespeare as performed by notable actors.

*Faculty of Education*—Convener: J. W. Gilles, 21 programs. Two series of programs were included in the year's program. The first, dealing with the Status of the Teaching Profession was based on a report of the Canadian Educational Association, and was presented by members of the Faculty of Education. The second, dealing with Studies in Child Development, was presented by members of a graduate class in Child Psychology under faculty supervision.

*Why Stop Learning?*—Convener: A. S. R. Tweedie, 23 programs. This series continued to outline the work of the Extension Department of the University and to offer assistance to communities in the planning of their recreational programs.

*Wonder Box*—Convener: Zella J. Oliver, 18 programs. Presented by students in the Faculty of Education under faculty direction this program for children featured radio adaptations of Alice in Wonderland and Alice Through the Looking Glass.

*World of Science*—Convener: D. B. Scott, 21 programs. These programs offered glimpses into many of the fields of scientific endeavor with which the University is concerned.

*Your Home and You*—Convener: Mabel Patrick, 24 programs. Dealing with many problems of the home-maker, this series presented by the Department of

Household Economics furnished women throughout Northern and Central Alberta with much valuable information.

*University Round Table*—Convener: A. S. R. Tweedie, 6 programs. Contributing to this series sponsored by the Western Network of the Canadian Broadcasting Corporation, the University of Alberta and the other three western universities each presented one round table discussion a month throughout the winter season. This half-hour program was broadcast over CBX.

*Student Programs*

The Radio Society of the Students' Union of the University has this past year shown a marked increase in initiative. It has sponsored a workshop course in basic radio techniques and a course in script writing.

Under its auspices three full-term radio series were presented and several series of shorter duration. In addition, there were a number of special feature broadcasts. All announcing and continuity-writing was handled by students.

*Sunday Song*—Featuring two vocal soloists and two pianists, this program was awarded the CKUA Plaque, presented annually for the best student program-series.

*Calling Home*—This program took the form of interviews with students whose homes were in all parts of the province, followed by a musical dedication by each student interviewed.

*Sportlines*—A review of the sport activities at the University was presented in this weekly broadcast.

*Talent Series, The Harp Thornton Program, and Coffee Time* were presented in the course of the year as series of shorter duration.

**Report of the Director of the Western Board of Music in Alberta,  
Professor R. S. Eaton**

*Statistics and Estimates (Candidates and Fees)*

May, 1948—Theory .....	206
June, 1948—Practical .....	806
February, 1949:	
Theory .....	170
Practical .....	38
Total.....	1220
Fees .....	\$3,540.50

*Examinations*

- (a) Practical Centres—June, 1948:  
Edmonton, Calgary, Lethbridge, Drumheller, Red Deer, Medicine Hat, Bonnyville, Fort Kent, Glendon, Saint Paul, Falher, Rycroft, Grande Prairie, Peace River, McLennan, Lacombe, Alix, Ponoka, Innisfail, Coleman, Pincher Creek, Cardston, Wainwright.
- (b) Practical Centres—February, 1949:  
Calgary, Edmonton.



(c) Examiners in Practical Subjects—June, 1948:

Mr. Ross Pratt, Montreal, P.Q. (senior pianoforte).  
Mr. John Waterhouse, Winnipeg, Manitoba (violin).  
Professor J. D. Macrae, Saskatoon (pianoforte, vocal, organ).  
Mr. Lawrence Cluderay, Calgary (pianoforte, voice, organ).  
Mrs. Beulah Doney, Edmonton (piano).  
Mr. R. S. Eaton, Edmonton (pianoforte, vocal).

(d) Examiners in Practical Subjects—February, 1949:

Mr. Lawrence, Cluderay, Mr. R. S. Eaton.

(e) Diplomas Granted:

Fall Convocation, 1948:

Mary-Ella Coldwell, Calgary; Jean Keeley, Mayerthorpe, Raphael Lopatka, Andrew; Geraldine Mason, Edmonton; Jocelyn Rogers, Edmonton.

Spring Convocation, 1949:

Mrs. Gertrude A. Moyse, Red Deer.

*Recitals*

Successful presentations of awards at regional recitals were held during late September and October in Calgary, Edmonton, Red Deer, Fort Kent, and Peace River. Visiting candidates performed during these recitals in Red Deer, Fort Kent, and Peace River. These performances by talented Western Board students were very much appreciated by the people of these places. As a result of the Peace River recital five new awards were made available to the Board.

*Return of Theory Papers*

Alberta this year used Theory papers set by Manitoba. Several favorable comments have been received as a result of returning candidates' papers. Teachers find it extremely useful in estimating the actual progress of their students.

*Syllabus Revision*

The revision of the present syllabus is being continued by committees in Manitoba, Saskatchewan, and Alberta and the new syllabus will be ready for use for the academic year 1950-51.

*Examiners for June 1949*

The visiting examiners for the practical examinations for June, 1949, are: Mr. Jacques Jolas, Mt. Vernon, Iowa (senior pianoforte); Mr. Filmer Hubble, Winnipeg (pianoforte, vocal, organ); Mr. W. Knight Wilson, Regina (violin).

Other examiners (in both practical and theoretical work) will be drawn from the list previously approved by the University Committee on Music.

*Scholarships, Bursaries, Prizes and Medals in 1949*

Moneys totalling more than \$4,000 are available in the form of scholarships, bursaries, money and book prizes for the music students in Alberta examined by the Western Board. The Board is extremely grateful to the welfare organizations, service groups, corporations, businessmen and private individuals who are showing an interest in the work of the University in this connection and who make these awards possible.

A significant contribution to the work of music in the province is the awarding, for the second consecutive year, of ten bursaries of \$100 each to Western Board students by the Government of Alberta. These have been of inestimable value, especially to winners from rural areas.

The Banff School of Fine Arts offers this year, to the Western Board in Alberta, Saskatchewan, and Manitoba, two \$75 bursaries covering tuition at Banff. The bursaries are open to candidates in the higher practical grades who have done particularly well in examination and who would benefit by attendance at the School.

The Gold Medal offered by the Board of Governors of the University of Alberta to the candidate receiving the highest standing in completing the final examination of the A.Mus. (Alberta), and the Western Board silver medals awarded to candidates gaining the highest marks in each grade in each subject are proving a great incentive to music students throughout the province.

## **Report of the Director of the Summer Session, Professor G. M. Dunlop**

### *Registration and Attendance*

The advance registration reached the total of 1,776 students. Cancellations were received from 153 students. However, instead of the 1,623 students expected only 1,447 students appeared for classes. Of these 90.81% were Education students, 9.19% from all other Faculties.

I was concerned over the number of students who had registered in advance but failed to appear for classes. I have been informed that the proportion is much the same as that of previous years. It is probably due in part to personal reasons, but may be attributable in some degree to inability to make satisfactory progress in pre-session study.

### *Instruction*

The summer Session staff was composed of 43 members of the University staff, 29 instructors drawn from the Department of Education and the school systems of the province and 12 visiting instructors. The total number of instructors was 84.

The visiting instructors included Dr. R. C. Lodge, of the Department of Philosophy, Queens University; Professor C. J. Vincent, of the Department of English, Queens University; Brother Thomas of the Christian Brethren in St. Louis; Miss M. Pratt, Supervisor of Reading, Spokane Public Schools; Miss D. McIlvain, Supervisor of Art, Spokane Public Schools; Mr. R. W. Ross, who has been doing graduate study in Harvard; Miss D. S. Runciman, Professor of Household Economics, University of New Brunswick; Miss M. Wybourne, who has been recently appointed to the staff of the University of Washington; Mr. J. E. L. Peck, from South Africa, who has been doing graduate study in Yale; Miss M. McDonough, of Toronto and Yale; Miss Violet Archer, of Montreal, who has also been doing graduate study in Yale; and Mr. Fred Karam, senior student in the Toronto Conservatory of Music.

### *Courses*

Seventy-six full courses and 8 half courses were offered during the Summer Session. There were 22 laboratory courses, in which is included shop, dramatic,

music, and mathematics laboratory courses as well as those in the physical sciences. Seventy-four courses were offered in Edmonton and 10 in Calgary.

This year two courses, Social Studies XII and English XII, were offered at the request of the Department of Education for the convenience of teachers with incomplete matriculation. The attendance reached 30 in Social Studies and 22 in English. A similar course in Biology XII was cancelled due to insufficient registration. I would recommend the continuance of this practice, as it will assist teachers to reach the point where they can commence work towards their degrees.

The mean size of classes was 32.1 students.

### *The Problem of Student Preparation*

The greatest weakness in the entire Summer Session program seems to be the lack of adequate preparation by certain of the students for the courses in which they were registered. In Latin 1, Dr. May found approximately one-third of his students unready for the level of instruction necessary for the completion of the course. In Mathematics 1 or A, Mr. Bruce reported a marked weakness in the mathematical background of many of his students. In other courses where extensive reading is necessary, for example, Education 476 (Educational Psychology), there was evidence of insufficient preliminary reading.

Inadequate preparation is at least partially the result of late registration. In my opinion the Summer Session should make it possible for students to complete their registration at an earlier date and receive their course bibliographies and pre-session guidance outlines in time to complete much of their study during the winter months.

### *Special Events Program*

This year the Special Events Program consisted of six addresses, two musical evenings, one recital of choral music, and a matinee and two evening performances of the Drama Workshop Group. Two addresses were delivered by Pandit Rishiram, who was sponsored by the India Information Office in Ottawa. The addresses were exceptional in quality and warranted better support. The two Sunday evening musical recitals, one an organ recital by Professor Eaton and the other a musical appreciation evening conducted by Miss Violet Archer, were quite successful. The Choral Recital of the combined music classes, organized by Professor Eaton and Miss Violet Archer, was one of the most enjoyable evenings of the Session. The Drama Workshop Production under the direction of Professor Orchard and Miss McDonough received great commendation. The small admission charged at the three drama performances went a short distance towards meeting the cost of the dramatics courses.

### *Student Affairs*

The president of the Students' Union of the Summer Session, Mr. R. Eyres, was experienced and efficient in the management of student affairs. Two meetings of the Students' Union were held during the Summer Session as required by the constitution of the Union. The social program was regarded as quite successful. Due to the Drill Hall being unavailable, dances were held in Athabasca gymnasium each Friday night. The semi-formal party was held in Athabasca dining room.

It is worthy of note that attendance at dances is quite small, the bulk of the students apparently preferring other recreational activities. Many return to their

homes for week-ends as no lectures or laboratory periods are scheduled for Saturday.

The Union conducted a campaign for funds for the Students' Union Building Fund and achieved a highly satisfactory response in view of the fact that the contribution was voluntary. The Union passed a constitutional amendment in 1947 designed to make this contribution a part of the compulsory fees collected by the University.

### *The Routine of the Summer Session*

The Get-Acquainted Tea for the staff of the Summer Session and their wives was quite successful. The informality and flexibility of the tea permitted much more freedom of movement than would the staff dinner suggested earlier, and staff members had a better opportunity to meet their associates and the visiting instructors. It was also much more economical.

The staff meeting, held the evening of the second day, was well attended and performed a useful service in acquainting newcomers with the routine of the Summer Session.

All students were given an opportunity to fill in an application for courses to be offered during the 1949 Summer Session. Four hundred and sixty sheets were completed. The information will be helpful. Another year the instructors will be asked to have the sheets completed by the Summer Session students and returned during a lecture period, thus insuring a greater percentage of response.

Exhibits of class work were held in the Education Building by many instructors. Miss McIlvain of Spokane, Washington, held an exhibit of children's art during the first two weeks of the Summer Session. She also held an exhibit of the work of the Arts and Crafts course, Education 152, in the last three days of the course. Dr. D. MacDougall held an exhibit of the work of the Workshop on Elementary Education during the last week. Mr. W. Irwin, the instructor in Education 132, had a most interesting exhibit in the foyer of the Education Building in which the work of his class in creative design was on display.

Each staff member was asked to report on means of improving instruction in his course and for suggestions designed to improve the Summer Session as a whole. Thirty-seven out of the entire staff of 84 responded. Their recommendations centre around earlier registration and more careful pre-session guidance, and achievement of six full weeks devoted completely to instruction.

**Report of the Director of the Department of Extension,  
Mr. Donald Cameron**

**Statistical Survey**

*Lectures*

University Teaching staff .....	754	
Department of Extension staff .....	258	
	—	1,008
Aggregate attendance .....		57,404
Number of radio talks .....	235	

*Conferences and Short Courses*

Refresher course in Sanitary Inspection .....	26
Refresher course in Recreational Leadership .....	26
Nurses' Institute on Guidance .....	125
Short Course for Librarians of Small Libraries .....	12
Farm Young People's Conference .....	125
Refresher Course in Pharmacy .....	75
Refresher Course in School Administration .....	73
Refresher Course in Municipal Administration .....	70
University Short Course and Co-op. Conference .....	57
Short Course in Painting at Lethbridge .....	14
Short Course in Painting at Medicine Hat .....	15
Community Life Conferences at—	
Lake Saskatoon .....	169
High Prairie .....	111
Bear Lake .....	233
Gooseberry Lake .....	186
Ft. Assiniboine .....	96
	— 795

*Film Utilization Workshops at—*

Forestburg .....	16
Blairmore .....	47
Foremost .....	60
Medicine Hat .....	42
Lethbridge .....	18
Donalda .....	70
	— 253

*Agricultural Short Course for Employees of Imperial Oil  
Company*

Short Course for the Appraisal Institute of Canada .....	65
Institute on Ward Administration .....	86
Course in Choir Leadership .....	58
Course in Band Leadership, Camrose .....	35
Course in Accounting 1 and Business Mathematics—	
At Calgary .....	35
At Edmonton .....	55
	— 90

Clothing Course for wives of Student Veterans .....	78
Course in Child Psychology .....	70



22 Extension classes in Painting—12 in Edmonton, 10 at outside points .....	328	
Courses in Drama in Edmonton and Lethbridge .....	40	
Banff School of Fine Arts .....	608	
	—	3,149
<i>Visual Instruction</i>		
Number of times lantern loaned .....	36	
Film-slides and miniature projectors loaned .....	55	
Sets of lantern slides sent out .....	249	
Sets of miniature slides sent out .....	278	
Number of times slides used .....	726	
Aggregate attendance lantern lectures .....		27,617
Film-strips sent out .....	2,410	
Number of times film-strips used .....	1,912	
Aggregate attendance, film-strips .....		58,785
Sets of moving picture films sent out .....	3,831	
Number of reels in sets sent out .....	16,241	
Number of showings given .....	5,192	
Aggregate attendance, moving pictures .....		525,041
Aggregate attendance Branch Libraries film showings .....		158,727
<i>Library and Debating Service</i>		
Number of travelling libraries in use .....	90	
Number of times sent out .....	207	
Recorded circulation .....		7,179
Number of special libraries sent out (circulation included in Open Shelf) .....	120	
Open Shelf Circulation:		
Books (including special libraries) .....	49,218	
Banff School circulation .....	5,246	
Plays .....	2,607	
Periodicals and pamphlets .....	4,304	
	—	61,375
Number of package libraries for debaters sent out .....		90
<i>Study Group Material</i>		
Number of sets of Citizens' Forum Bulletins sent out (weekly) .....	82	
Number of sets of other study group material sent out.....	40	
	—	122
<i>New Canadian Plays</i>		
Number of copies of New Canadian plays sold .....		445
Number of copies of Proceedings of Soil Mechanics sold.....		96
<i>Publications</i>		
Press Bulletin, Seasonal Crops .....	10,000	
Press Bulletin, Feeders' Day Programme .....	2,000	
	—	12,000



Bulletins sent out during the year .....	16,208
Mimeo, circulars and other bulletins .....	500
	<hr/> 16,708
Total number of bulletins distributed since inception of service .....	469,162
University News Letter:	
Number of issues .....	14
Circulation 14x350 .....	4,900
The New Trail—number sent out .....	10,450

### *Recapitulation*

Total aggregate attendance at lectures, conferences and short courses, lantern slide lectures, film-strip programmes, moving pictures, Circulating Film Exchanges .....	830,723
Total circulation of travelling libraries, books, pamphlets, periodicals, plays, sets of study group material, New Canadian plays, Proceedings of Soil Mechanics and Concrete .....	69,307
Total circulation of Press Bulletins, Agricultural publications, News Letter, New Trail .....	44,058

## **Conclusion**

In bringing to a close the 36th year of Extension activities in the University of Alberta it is gratifying to record that the services the University has to offer have been in greater demand than ever. There is evidence that as the province grows older more groups of people with special interests, needs and problems are coming to the University for assistance. This is attested by the fact that the number of specialized Extension courses has been growing year by year, and in the past year more than doubled that of the year before. In the present phase of rapid industrial development of the province, the demand for such services is likely to increase rather than to decrease. This will impose a heavy drain on the University's resources. However, to be successful a modern state university must be actively associated with the industrial, economic, social and cultural life of its constituency. The closer the institution can be identified with the life of the community the healthier the relationship between the University and the people is likely to be.

The manifold activities recorded in this report\* indicate that the University of Alberta is playing a vitally important and balanced role in building a great province.

## **Report of the Director of the Provincial Laboratory of Public Health, Dr. R. M. Shaw**

### *Routine Examinations*

The appended table gives a very clear picture of the work of the staff during the year. The total number of examinations made was almost identical with that of the year immediately preceding, viz., 161,083 for 1948 as compared to 160,772 for 1947. Small increases are noted in a considerable number of the items reported, whereas the decreases mainly affected three types of examination. Among the

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\*The complete Annual Report on Extension Activities of the University of Alberta for the year ended March 31, 1949, which includes a report on the 1948 session of the Banff School of Fine Arts, is available in printed form.

decreases is the test relating to the determination of the Rh factor in bloods. This work was taken over by the Red Cross Blood Donor Service, by whom it could be more effectively done.

### *Building Projects*

During the year plans were drawn for a branch laboratory in Calgary and for a new main laboratory in Edmonton. Construction of the former was begun on the selected site on the grounds of the Central Alberta Sanatorium. It is expected the building will be ready for occupation by August, 1949. The ground floor and basement of the extension to the East Wing of the Medical Building were occupied by the Provincial Laboratory and the University Departments of Bacteriology and Pathology in the early autumn of 1949.

### *New Equipment*

The Department of Pathology of the Provincial Laboratory was greatly benefited by the receipt of a Scopicon, a gift from the Cancer Association, Alberta Division. This apparatus, because of its unique design in permitting ten persons to view at one and the same time a prepared slide under the one microscope, is most useful for instruction of internes and students. It is of particular value also for projection of microscopic and gross preparations on to screens and for photography permitting the preparation of coloured slides for projection.

### *Special Training Offered by the Laboratory*

*Nurses*—Seven nurses, enrolled in the course for the Diploma in Teaching and Supervision in Schools of Nursing, were admitted to the Provincial laboratory for three weeks to observe and carry out each day bacteriological and serological techniques under routine laboratory conditions. These students felt they gained much by this short experience.

*Internes*—During the past two years, four internes, graduates in Medicine from the University of Alberta, have been permitted three months each general instruction and experience in all the bacteriological and serological activities of the Provincial Laboratory. This instruction forms a part of the basic education required by these young doctors in their training as specialists.

The Provincial Laboratory contributes in no small measure to the training of internes in the Department of Pathology.

The Provincial Government regulation whereby tissues removed at operation, in hospitals not served by a Pathologist, must be forwarded to the Provincial Laboratory for examination provides a wealth of surgical material, which is ideal for teaching purposes. The number and variety of tissues received would be difficult to duplicate under any other arrangement.

Autopsy examinations in medico-legal cases are also carried out by the Pathology staff, according an opportunity for interne instruction in this important field.

Weekly conferences in the Department held in conjunction with the other Pathologists in city hospitals are an added feature of the training program.

Internships in the Department of Pathology of the Provincial Laboratory are offered on a six-month or yearly basis, although shorter or longer periods of training are occasionally requested.

It is of interest to report that over the period from 1927 to the present time, 75 medical graduates have served internships in the Department of Pathology.

It is felt that the training offered should prove of lasting value in whatever field of Medicine the candidate may choose to follow.

### *Staff*

During the year Miss Margaret Finlayson, B.Sc., and Miss Ethel Shelene, B.Sc., were granted leave of absence for purposes of special study. Miss Finlayson in January and February received her special two months' training in the bacteriology of enteric infections at the Salmonella Centre, Division of Laboratories, The Ontario Department of Health, Toronto, while Miss Shelene attended a three weeks' course in September on the serology of syphilis given at the Laboratory of Hygiene, Ottawa. These courses have been of great benefit not only to the technicians concerned but have brought improvement generally in the work and reports of the laboratory, and have had a very beneficial effect on the morale of the staff generally.

There was during the year a rather larger than usual number of changes in the technical and clerical staffs. Desire to pursue studies elsewhere, claims of family and matrimony, were given as reasons for resigning. Replacements have been difficult and some shortage of permanent staff still exists.

It is a pleasure to record, however, that loyal and cheerful support has been given by all members during the period under review.

**Table XIII—Work Performed in the Provincial Laboratory of Public Health During the Year 1948**

	Total 1947	Total 1948	Increase	Decrease
Sputum Examination .....	680	768	88	.....
Diphtheria and Haemolytic Streptococci.....	3,278	3,713	435	.....
Typhoid Fever (Agglutination Test) .....	1,433	1,698	265	.....
Milk .....	1,146	1,278	132	.....
Water .....	4,038	4,608	570	.....
Guinea pig inoculations .....	1,377	1,886	509	.....
Miscellaneous Bacteriology .....	7,040	6,805	.....	235
Blood Cultures .....	701	764	63	.....
Enterobacteria and Intestinal Parasites.....	915	1,362	447	.....
Urinalysis .....	19	10	.....	9
Medico-Legal (Blood, seminal, etc.) .....	8	5	.....	3
Cerebro-spinal fluids for the Wasserman test .....	2,849	2,958	109	.....
Bloods for the Quantitative Kahn Test.....	2,741	2,815	74	.....
Bloods for the Wassermann Test .....	9,256	10,322	1,066	.....
Bloods for the Standard Kahn Test .....	8,810	9,992	1,182	.....
Bloods for the Presumptive Kahn Test .....	74,156	74,635	479	.....
Smears for Gonococcus .....	15,482	14,202	.....	1,280
Cultures for Gonococcus .....	4,554	2,897	.....	1,657
Van Den Bergh determinations .....	269	189	.....	80
Bloods for Rh factor .....	3,078	.....	.....	3,078
Pathological Histological material .....	10,761	11,089	328	.....
Blood Smear Examinations .....	175	230	55	.....
Post-Mortem Examinations .....	310	367	57	.....
Ascheim Zondek Tests .....	472	472	.....	.....
Comparative Series .....	38	8	.....	30
Fluids for Cancer Cells .....	.....	116	116	.....
Bone Marrows .....	.....	56	56	.....
Cerebro-spinal fluid, examinations (Colloid Gold, Pandy) .....	3,024	3,233	209	.....
.....	111	159	48	.....
Bacteriological examinations (P.M.) .....	.....	.....	.....	.....
B. abortus examinations (Agglutination Test) .....	1,433	1,719	286	.....
.....	1,433	1,698	265	.....
B. tularensis (Agglutination Test) .....	.....	3	3	.....
B. melitensis (Agglutination Test) .....	.....	.....	.....	.....
Cattle Blood (Bang's disease Agglutination Test) .....	1,185	1,046	.....	139
<b>Total</b> .....	<b>160,772</b>	<b>161,083</b>		

**Report of the Director of the Provincial Industrial Laboratories,  
Mr. J. A. Kelso**

During the year the Industrial Laboratories carried out 7,400 examinations and analyses, an increase of 1,529 over the previous year. The following table indicates the kind of work done.

**Table XIV—Materials Most Frequently Examined or Analysed by the  
Industrial Laboratories, 1948-49**

	No. of samples		No. of samples
Antifreeze .....	42	Narcotics .....	100
Blood .....	24	Ore .....	239
Coal .....	120	Poison examinations .....	293
Feed, animal .....	97	Rock .....	102
Feed, poultry .....	19	Sand .....	39
Flour .....	21	Spinal fluids .....	413
Gasoline .....	26	Veterinary Laboratory exam- inations .....	215
Gold .....	92	Water .....	1,236
Industrial chemicals .....	21	Wheat .....	154
Liquor .....	939	Concrete cylinders .....	2,361
Milk .....	64		
Electricians' gloves .....	101		

Engineering materials were handled in conjunction with the departments of Civil and Electrical Engineering.

Usual investigations were carried out for various Government departments such as the Attorney General, Provincial Secretary, Lands and Mines, Agriculture, Health, Public Works, Veterinary Laboratory, Alberta Liquor Control Board, the latter requiring the Provincial Analyst to have direct control of all beer sold in Alberta and to inspect and approve all breweries. Usual court evidence was given and examinations made in cases coming under Canadian Criminal Code and various Dominion and Provincial Acts and regulations, such as Alberta Liquor Control Act, Excise Act, Opium and Narcotic Drug Act.

We have had the usual co-operation with the Dominion Department of National Health and Welfare, who are carrying out investigations with the Provincial Department of Health and The Workmen's Compensation Board.

Required analyses were made for R.C.M.P. and other police officers and for Provincial Coroners, and at all times the Provincial Analyst has to be available for court appearance. All analyses on an industrial basis are made as requested by manufacturers, etc.



REPORT  
OF  
THE GOVERNORS  
OF THE  
UNIVERSITY OF ALBERTA  
1949-50



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*To the Lieutenant Governor in Council*

SIR:

On behalf of the Governors of the University of Alberta, and in accordance with Section 28 of an Act respecting the University of Alberta, the undersigned have the honour to transmit through the Minister of Education the Report of the University of Alberta, setting forth the revenues and expenditures for the year ending March 31st, 1950, and the investments as they stood at the end of the fiscal year.

Appended to this report is the Report of the President of the University, in which the academic work of the University for the year July 1st, 1949, to June 30th, 1950, is dealt with in detail.

C. M. MACLEOD, *Chairman*

A. STEWART, *President*

November 30th, 1950



# Financial Statements

## UNIVERSITY OF ALBERTA

## STATEMENT A

### BALANCE SHEET AS AT MARCH 31, 1950

#### ASSETS

##### FIXED:

Buildings and equipment in service:		
Land, buildings and plant, Schedule No. 1.....	\$8,223,167.33	
Furnishings and equipment, Schedule No. 2.....	1,733,689.37	
		\$ 9,956,856.70

##### LOAN RECEIVABLE:

Students' Union re Students' Union building, see contra .....		322,659.83
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##### CURRENT:

Cash on hand and in bank .....	\$ 100,508.96	
Accounts receivable:		
Sundry debtors .....	\$ 79,247.42	
Less: Reserve for doubtful accounts .....	2,500.00	
	\$ 76,747.42	
Government of the Province of Alberta re construction of buildings .....	278,694.27	
Due from trust account .....	4,678.00	
		360,119.69
Accrued interest .....		4,241.67
Merchandise held for resale, Schedule No. 4.....		83,169.83
Dominion of Canada bonds .....		10,000.00
		558,040.15

##### PREPAID EXPENSES:

Supplies on hand, Schedule No. 4 .....	\$ 59,734.56	
Unexpired insurance .....	29,451.97	
Legal retainer fee .....	375.00	
Unemployment insurance stamps .....	236.46	
		89,797.99

##### OTHER ASSETS:

Livestock inventory .....	\$ 25,857.50	
Agreement for sale .....	8,925.00	
Deposit, Workmen's Compensation Board .....	8,564.00	
		43,346.50

##### TRUST:

Investments, Schedule No. 5:		
	Par Value	Book Value
Dominion of Canada bonds .....	\$ 733,100.00	\$ 737,192.50
Province of Alberta debentures .....	685,600.00	685,750.99
Province of Alberta special adjustment coupons .....	14,387.97	13,993.09
Preferred shares .....	500.00	500.00
	\$1,433,587.97	\$1,437,436.58

Cash on hand and in bank .....	213,105.33	
Loans receivable .....	72,591.23	
Debenture interest receivable, deferred .....	24,791.75	
Mortgage receivable, past due .....	1,786.39	
Real estate, shares and sundry, nominal value .....	9.00	
		1,749,720.28
		<u>\$12,720,421.45</u>

# LIABILITIES

## CAPITAL AND SURPLUS:

Capital provided by the Government of the Province of Alberta .....	\$3,468,992.19	
Capital surplus .....	1,566,069.66	
		<u>\$10,035,061.85</u>

## LOAN PAYABLE:

Government of the Province of Alberta re Students' Union building, see contra .....		322,659.83
---	--	------------

## CURRENT:

Accounts payable .....	\$ 223,095.38	
Imperial Bank of Canada loan .....	6,000.00	
Cafeteria tickets outstanding .....	1,284.38	
		<u>230,379.76</u>

## DEFERRED INCOME:

Fees .....	\$ 6,355.57	
Other .....	2,346.68	
		<u>8,702.25</u>

## RESERVES:

Retroactive pension contributions .....	\$ 50,000.00	
Unexpended library fees .....	30,509.46	
Premium on Rockefeller endowment .....	18,221.66	
Extraordinary maintenance and repairs .....	16,000.00	
Dining room repairs and replacements .....	15,925.79	
Workmen's Compensation Board .....	13,547.59	
Plant science field laboratory .....	13,420.05	
Unexpended University Athletic Board fees .....	13,230.19	
Blood plasma unit .....	10,000.00	
Rink repairs .....	9,303.91	
Provincial Laboratory of Public Health, operating .....	12,968.06	
Operating, general .....	170,770.77	
		<u>373,897.48</u>

## TRUST:

General endowment Rockefeller Foundation .....	\$ 500,000.00	
Scholarships:		
Escheated estates .....	\$318,798.48	
General .....	212,234.52	
		531,033.00
Research .....		292,223.01
Student grants and loans .....		99,190.77
General educational purposes .....		55,993.83
Pensions .....		38,589.84
Sundry:		
Administered by the University .....	\$ 70,735.23	
Held on behalf of others .....	157,276.60	
		228,011.83
Due to general account .....		4,678.00
		<u>1,749,720.28</u>
		<u>\$12,720,421.45</u>

Edmonton, Alberta, July 20, 1950

I have audited the books and records of the University of Alberta for the year ended March 31, 1950.

### Operating Results

Operations for the year under review resulted in a surplus of \$74,518.52 after providing \$13,019.38 from current revenue for expenditure on new buildings and equipment.

The surplus for the year was transferred to the operating reserve and transactions within that reserve are set forth in Statement C.

Maintenance and upkeep of buildings used by the Faculty of Education in Edmonton and Calgary has been provided by the Province direct.

### Financial Position

Buildings, plant, furnishings and equipment are stated on the Balance Sheet at original cost. No provision has been made for depreciation, but an independent appraisal performed during the year indicates that the value of furnishings and equipment has been maintained by additions and renewals from revenue and reserve accounts.

In order to finance a Students' Union building the Province of Alberta has agreed to make interest free advances totalling \$400,000.00 to the University of Alberta. Repayments are to be made by the University from annual instalments received from the Students' Union. The loan receivable shown on the Balance Sheet in the amount of \$322,659.83 represents the Province's advances to March 31, 1950. Under authority of Order-in-Council No. 690 dated June 12, 1950, the University was authorized to issue a debenture to the Provincial Treasurer for \$400,000.00 pledging the repayment of the total sum to be advanced.

Inventories of merchandise for resale and supplies on hand are certified as to quantities and prices by officials of the University.

Capital and surplus transactions during the year are summarized hereunder:

#### Capital provided by the Government of the Province of Alberta:

Balance as at April 1, 1949 .....	\$7,328,231.00
Add:	
Library construction .....	575,414.44
Provincial Laboratory of Public Health .....	313,957.82
Other buildings and improvements .....	128,863.69
Equipment .....	87,174.92
Paving .....	32,350.32
Implementation of guarantee .....	3,000.00
	<hr/>
	\$ 8,468,992.19

#### Capital surplus:

Balance as at April 1, 1949 .....	\$1,141,199.93
Add:	
Students' Union building transferred .....	260,199.83
Buildings acquired from donated funds .....	114,824.78
Building provided from reserve funds .....	11,579.95
Income contributions:	
Library .....	25,245.79
Buildings and equipment .....	13,019.38
	<hr/>
	1,566,069.66
	<hr/>
	<u>\$10,035,061.85</u>

Subject to the foregoing remarks, I certify that, in my opinion, the above Balance Sheet is properly drawn up so as to show the true financial position of the University of Alberta as at March 31, 1950, according to information and explanations given to me and as shown by the books of the University, and the accompanying Statement of Revenue and Expenditure correctly sets forth the result of operations for the year ended at that date.

C. K. HUCKVALE, C.A.  
Provincial Auditor



UNIVERSITY OF ALBERTA  
STATEMENT OF REVENUE AND EXPENDITURE  
FOR THE YEAR ENDED MARCH 31, 1950

REVENUE

Grants:

Province of Alberta:		
General .....	\$1,300,000.00	
Debt charges, see contra .....	265,079.46	
	<hr/>	
	\$1,565,079.46	
Dominion of Canada:		
Department of Veterans' Affairs, supplementary		
grant re rehabilitation students .....	151,701.71	
	<hr/>	\$ 1,716,781.17

Fees:

Tuition, Schedule No. 7 .....	\$ 712,382.96	
Examination and special, net, Schedule No. 8.....	7,370.02	
	<hr/>	719,752.98
Interest on Rockefeller Foundation endowment .....	\$ 17,500.00	
Deduct: Transferred to medical research trust .....	5,000.00	
	<hr/>	12,500.00
Library fees, see contra .....		21,256.00
University Athletic Board fees, see contra .....		18,268.00
		<hr/>
		\$ 2,488,558.15

EXPENDITURE

Instructional expense:

Instructional salaries and direct expenses, net,		
Schedule No. 9 .....	\$1,525,596.38	
Maintenance of buildings, Schedule No. 10 .....	234,890.42	
Administrative salaries and expenses, Schedule		
No. 11 .....	88,206.36	
Library salaries and expenses, Schedule No. 12 .....	71,515.92	
Upkeep of grounds, Schedule No. 13 .....	32,125.53	
Provision for library accessions, see contra .....	21,256.00	
Pension arrears, Schedule No. 14 .....	19,447.95	
Provision for University Athletic Board expenses,		
see contra .....	18,268.00	
Calendars scientific and other publications, Sched-		
ule No. 15 .....	12,889.72	
Alumni office, Schedule No. 16 .....	6,489.03	
Provost's office, Schedule No. 17 .....	4,810.72	
Travelling expenses, instructional staff .....	3,423.97	
Veteran counselling, Schedule No. 18 .....	832.48	
Exchange .....	258.52	
	<hr/>	\$ 2,040,011.00

Public service departments net expenditure, Schedule		
No. 19 .....	89,276.27	
Operating departments net expenditure, Schedule		
No. 20 .....	6,653.52	
Debt charges, see contra .....	265,079.46	
Buildings and equipment purchased from income,		
Schedule No. 6 .....	13,019.38	
	<hr/>	\$ 2,414,039.63

Surplus for the year ended March 31, 1950, transferred		
to operating reserve .....		\$ 74,518.52
		<hr/>

UNIVERSITY OF ALBERTA  
STATEMENT OF OPERATING RESERVE  
FOR THE YEAR ENDED MARCH 31, 1950

STATEMENT C

Balance as at April 1, 1949 .....		\$ 111,120.60
Add:		
Adjustments in respect of previous years:		
Returned from trust account:		
Staff building loan fund .....	\$ 50,000.00	
Unexpended balance of fund for purchase of		
Rutherford Library of Canadiana .....	5,000.00	
Miscellaneous, net .....	400.29	
		<u>54,599.71</u>
		\$ 165,720.31
Add:		
Surplus for the year ended March 31, 1950 .....		74,518.52
		<u>\$ 240,238.83</u>
Deduct:		
Reserve provisions:		
Retroactive pension contributions .....	\$ 50,000.00	
Dining room repairs and replacements .....	6,500.00	
Provincial Laboratory of Public Health, excess of		
revenue over expenditure .....	12,968.06	
		<u>69,468.06</u>
Balance as at March 31, 1950 .....		<u>\$ 170,770.77</u>

*To the Governors of the  
University of Alberta*

GENTLEMEN:

I have the honour to submit the following report on the work of the University of Alberta for the year ending June 30th, 1950.

A. STEWART  
*President*

# *The Report of the President, Dr. Robert Newton*

*As presented to Convocation, October 22, 1949*

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We have entered upon another session of university work, with a body of students somewhat larger than we had expected. With the graduation of large post-war classes of student veterans, we had estimated declines in our total registration of 700 last year and 600 this year. Actually the decline was about 400 and 300 respectively. Consequently we still have a body of some 4,300 regular winter-session students.

The rapid growth of the province, and especially of the city of Edmonton, no doubt accounts in large part for the well-sustained university population. The number of "civilians" in our freshman classes, as distinct from student veterans, has been growing lately at the rate of over 100 a year, and this year stands at 1,249.

Summer session attendance was well maintained, with 1,460 at Edmonton, 41 at Calgary, and 488 at Banff. The Edmonton figure is 55 higher than last year, the Banff figure 100 lower. The Banff School of Fine Arts draws students from the whole continent, as well as a few from overseas. The decline there, as judged by comments of students who cancelled their registration, was mainly due to some recession in economic conditions in other places.

As usual, the summer-session teaching staff, both at Edmonton and Banff, included a number of distinguished visitors from other provinces and countries. Of special note was the co-operation of the British Council in enabling us to get Professor Edward Bawden, of the Royal College of Art, for the Banff School staff. Professor Bawden, one of Britain's most outstanding artists, brought a fresh viewpoint and technique which was inspiring to staff and students alike.

The importance of the summer session may be judged by the number of graduands coming forward at the fall convocations. Last year there were 357, today there are 405. It is fair to add that those receiving diplomas in Nursing, of whom there are 23 today, finish regularly in the fall, and are not a product of the summer session. The same is true of perhaps ten or a dozen others in today's list.

As the great co-operative scheme for the education of returned Service men and women nears completion, it is a pleasure to record again how well these students have done. Of the 1,567 who wrote final exams last spring, 79 per cent obtained clear passes, and only 2 per cent did so poorly they could not be granted supplemental examinations. The student veterans have been a fine influence on the campus. Their contribution to university life and progress will not be forgotten.

Visitors to the campus can scarcely fail to observe the building activity going on in several places. Already enough progress has been made to enable us to provide reasonably adequate and up-to-date facilities for a number of departments, some of which, like Chemical Engineering and Dentistry, had not previously possessed any accommodation specifically provided for them. A year ago we opened the new Dental Clinic, second to none in the country. This fall we opened new Pharmacy laboratories, for which the same claim can be made. The Department of Fine Arts

has taken over the space vacated by Pharmacy in the Arts Building, and is now well equipped. The Banff School was happier and more effective this year because two more chalets, built with private funds, were available on the magnificent permanent site provided by the Dominion Parks Branch. In another year relief will come to various other departments, and the whole University will rejoice in the common sharing of the wonderful accommodation of the Rutherford Library.

The academic staff have been busy as usual during the intersession months of the summer. Many taught in the summer session, others continued their researches in the university laboratories, still others wrote books, or engaged in advanced studies elsewhere, or in educational travel overseas, or stayed at home to prepare material for new courses. A good deal of time was devoted by many members to attending meetings of scientific and professional societies in various parts of the country. At the annual convention of the Agricultural Institute of Canada in Vancouver in June, fellowships were bestowed on Dean R. D. Sinclair and Professor J. Macgregor Smith. At the annual meeting of the Royal Society of Canada in Halifax Professor M. H. Long was elected a fellow of that society. We are all pleased with the distinction these men have brought to themselves and to the University.

Dean M. E. LaZerte, of the Faculty of Education, completed two years' work as chairman of the Canadian Education Association committee on the status of the teaching profession in Canada. His report on this subject, presented at the annual meeting in Fredericton in September, created nation-wide interest.

Miss Zella Oliver, of the same faculty, who spent the summer in study at Columbia University, New York, played the title role of Oscar Wilde's "A Woman of No Importance" at the Drama Workshop Theatre of that university.

The Drama Division of our own Department of Fine Arts completed the installation of its studio theatre on the campus, and has now the technical equipment for complete instruction in play production.

The spring tour of eighty members of the University Mixed Chorus, directed by Professor R. S. Eaton, and sponsored by the Students' Union and the Cultural Activities Branch of the Department of Economic Affairs, was a great success, carrying good music to many centres and earning good will for the University and all concerned.

In the Department of Botany, under the direction of Dr. E. H. Moss, Miss Lorene L. Kennedy and two graduate students carried out a survey of the pollen and mold spores contained in the air around Edmonton at different times throughout the summer. This is of interest to doctors concerned in the treatment of hay fever and other allergies.

Members of the Department of Physics continued research or prepared papers on such diverse topics as the energies of beta-rays, solar ultra-violet light, applied spectroscopy, and specific heats and magnetic properties of iron and related metals at high temperatures.

These are examples only of the multifarious summer activities of our staff.

Something new in the scholarship field appeared this year, when the Canadian Amateur Hockey Association, through the good offices of our Professor W. G. Hardy, established four cultural scholarships for Canada, to be awarded each year for study abroad. This alliance of sport and culture is praiseworthy. Two of the scholarships have a value of \$2000 each, the others of \$1000 each. One of the

larger ones was awarded to Miss Milwyn Davies, one of our Fine Arts students who held a university scholarship in drama at the Banff School this summer.

Forty-one years ago this week, the University of Alberta held its first convocation in the Opera House, Strathcona (as Edmonton South was then known). On that occasion 364 graduates of other universities resident in Alberta, who had registered their desire to become members of this University, were admitted to the same degrees here which they already held from elsewhere, and so became the first members of Convocation. Today we delight to honour those first members, and rejoice that a goodly number of them have been able to return for the occasion, some from quite distant points. One who has remained here and given high service to Edmonton through the years has been selected as a representative of the group, to receive another degree and give the Convocation address today.

We are also delighted that some of the civic officials who took part in that first convocation are with us again. We welcome today Mr. J. J. Duggan, who was Mayor of Strathcona, Mr. J. M. Douglas, who was President of the Board of Trade, Mr. R. B. Douglas, who was a School Trustee, and Col. F. C. Jamieson, who was City Solicitor.

Finally, to the graduands here, who must always be the central figures of any convocation, I extend congratulations on the completion of their courses, and best wishes for all good success in the world they now undertake to serve.

### **Report of the President, Dr. Robert Newton**

*As presented to Convocation, May 16, 1950*

We expect to present to you for degrees and diplomas today and tomorrow the names of 1,286 students, or 43 more than last year. This year we pass the crest of the post-war flood. Next year the number will drop to a normal post-war level, though still about double the pre-war numbers. After that we look for a gradual increase again.

In view of the very large numbers of graduates last year and this year, it is gratifying that employment opportunities still seem adequate to absorb nearly all of them in suitable occupations. It is particularly gratifying that the growing industrialization of Alberta provides more opportunities here at home. I should add that the efficient organization of the National Employment Service, which maintains an office on the campus, increases the scope of employment available to graduates throughout the whole of Canada.

Our growth during the post-war period has not been merely in size. We have developed maturity, and improved the quality and variety of our teaching and research. The reports of the newer faculties of Education and Dentistry show that the academic qualifications of their staff are rising steadily. The degree of Doctor of Education is becoming very common in the faculty of that name, and a substantial number in both these faculties are devoting the inter-session months of the summer and other leaves of absence to advanced study.

Our output of research mounts steadily, too. There were 266 students registered in our Graduate School during the past session, mostly working on research projects. Research by staff members has been greatly assisted by special grants from outside sources, including the National Research Council, the Research Council of Alberta, the Defence Research Board, the National Cancer Institute, the Alberta



Tuberculosis Association, the Canadian Foundation for the Advancement of Pharmacy, the Canadian Construction Association, and a considerable number of industrial firms. Ninety-four published papers, the fruits of scholarship and research by staff members, are listed in my report as appearing during the past year. I am glad to say the humanities find a place in that list. One of the contributions in this field, a book by Dr. Healy and Professor Faucher, entitled "France: Silhouettes et Croquis", is of special interest as the first fruits of a comprehensive joint study, by members of our French staff, of nineteenth century French literature.

Our facilities for research in Canadian history have been greatly enriched by the acquisition of the late Chancellor Rutherford's collection of some seven to eight thousand early Canadian books and pamphlets, many of them dealing with Arctic discovery and the exploration and settlement of western Canada. We are very grateful to Mrs. S. H. McCuaig, who donated her half-interest in this highly valuable collection as a gift to the University.

Lately we had a visit from a former Vice-Chancellor of the University of South Africa. Noticing our beautiful and commodious Rutherford Library building, he congratulated us heartily on putting first things first, commenting that nowadays the pressure is so great for new laboratories of science and technology as often to push back plans for the library, the heart of any university. So while I am pleased to tell you we are graduating this year the first class of petroleum engineers, sixteen in number, thus serving an obvious need of the community, I am even more pleased that the deeper need of all students for a complete education is being ministered to.

In the Rutherford Library we shall have several large reading rooms with special collections of books dealing with medical sciences, biological sciences, law, engineering, and so on, but the main reading room to be used by all first-year students will have the walls lined with ten thousand carefully selected books covering the whole field of learning. Even if the freshmen do not read many of these books, they can scarcely fail to sense the vast extent of human knowledge outside the particular specialties they are hoping to master, and the desirability of getting some appreciation of fields outside their own. Thus do we hope to cultivate in our students the curiosity and broad interests that mark the scholar.

You may remember, in Barrie's play "Mary Rose", the crofter's son Cameron, who was studying for the ministry at the University of Aberdeen, sharing there a small room with his father, who was also working for a degree but intending to be a crofter again afterwards. When a friend remarked that he couldn't see what the father was getting out of it, Cameron replied, "He iss getting the grandest thing in the world out of it; he iss getting education". Many of our students see that, even though they may be forced to devote most of their time here to professional training. It is pleasant to observe their growing interest in the fine arts. They support enthusiastically the University Mixed Chorus, the University Symphony Orchestra, the Drama Club, the Art classes, the University Radio Service; and their new quarterly magazine "Stet" has set a high literary standard. It is significant that last year's graduating class ear-marked their parting gift for furnishing the music room in the Rutherford Library.

This year the Board of Governors recognized further the important contribution made by student leaders in extra-curricular activities, at a heavy sacrifice of time and

vacation earning opportunities, by authorizing the payment from scholarships funds of activity awards to the President of the Students' Union, the Editor-in-Chief of The Gateway, the Vice-Chairman of the University Athletic Board, the Director of the Year-book, Evergreen and Gold, and the Treasurer of the Students' Union. We rejoice with the students that this summer will see the completion of the first unit of the Students' Union building, built on their own initiative and largely at their own expense, and which will provide greatly improved facilities for student self-government and many other extra-curricular activities.

The University continues to serve as well as it can the educational needs of the whole province through multifarious extension activities. The Director of Extension reports during the year a total aggregate attendance of 817,516 at lectures and short courses of various kinds, a total circulation of 82,373 for travelling libraries, books, plays, and so on, and a total circulation of 55,927 of our own publications. The Banff School, with its beautiful new chalets, is proving, as you might expect, a popular centre for short courses and schools. The first annual short courses in Forest Conservation and Wildlife Management were held during February and March, and a course in Asphalt Pavements, their Design and Construction, in February. The University Radio Service added a novel contribution this year, by circulating our transcribed programmes to Dawson and a number of other small radio stations throughout North West Territories. Our University Music Hour, at 7 to 8 p.m., Monday through Friday, which has been on the air continuously since 1927, is the longest series of good musical programmes in Canada, and certainly one of the most appreciated in this part of the country.

A year ago I suggested that the most important single event in the year then under review was the presentation to the University Senate of a report on General Education. Its purpose was to secure for all students of the University a good education in addition to technical training. Several of its recommendations have since been carried into effect, and the interest it created has not diminished. The special feature of the whole subject which has occupied our attention this year is the problem of integrating high school and university courses.

There are two main factors which have tended to throw these two parts of our education system out of joint. *First*, the rapid expansion of social and economic interests among our people, and the development of technology, have led to a crowding of secondary school programmes with all kinds of subjects intended to meet the needs of modern life. The new courses have come in conflict with the traditional matriculation programme leading to the universities. They have postponed the average age of matriculation and reduced the real substances in the preparation of students for university work. *Next*, the secondary schools appear to be rushing into the so-called modern or progressive system of education faster than their facilities justify. That system requires modern schools, with more spacious rooms, smaller classes, better libraries and other forms of equipment, and above all, more and better teachers. When the pace is forced, schooling tends to degenerate into a game to be played, when it should be a training in grappling with tough problems. We would do well to heed the rising chorus of protest in the United States against the results of the system there.

The use of valuable school time in studying topics of passing interest and little real substance, and in exercises intended to adjust the pupils to their environment, things they can get by practical experience without going to school at all, is due, I

believe, to a carry-over of the old idea of giving a complete education in school. That stemmed from a period when labour worked 60 hours or more a week, and had little time or energy left for leisure-time study. Now we should recognize education as a life-long process. As technology progressively releases us from long hours and heavy toil, we must fill our spare time constructively or we shall certainly degenerate. Adult education is becoming an increasingly important part of our whole programme. Greek political thought took the institution of slavery for granted, and on it built a highly cultured civilization. We have replaced slaves by machines, but have scarcely more than begun to build our cultural structure.

The proper job for the schools is to lay a firm foundation for continuing education, whether in the university or outside of it. In either case, the first essential is to develop in all pupils the habit of hard work, and in those capable of it, hard intellectual work. There are, of course, diverse talents, and there must be diverse courses of training to match. So far as possible, the programme of every student should have a clear pattern and purpose, whether it leads directly from school to society, or through industrial apprenticeship, technical schools, or universities, into specialized walks of life. In all cases, without exception, the three R's are still the first essential. When we find students who cannot spell correctly or write good English, we know they have not been schooled in exact and rigorous thinking. I am firmly convinced that the high school matriculation programme, for all pupils capable of mastering it, is a better preparation for life than is given by the newer subjects. It provides a better foundation for any kind of subsequent education, whether it be taken in the university, or in the school of practical experience bolstered, as it should be, by adult educational opportunities. We are giving joint study to this question, with the Department of Education, and hope to find a reasonable answer.

I should like to end with a few remarks addressed particularly to the graduands, who are going out to take their places in a deeply troubled world. "If thine eye be single", said Jesus, "thy whole body shall be full of light". A single-minded consideration of any problem soon leads to a plain conclusion as to the proper course of action. Lack of single-mindedness leads to many contradictions.

Industrialists (or capitalists) argue for free enterprise, but all the while make selfish reservations in their own interest, for examples, high protective duties, combined price fixing, and other restrictive practices. Organized labour, indeed many organized groups, pay lip service to the public interest, but act in their own interest without genuine regard to the effect on public welfare. Even some professional societies, right here in Canada, put high inter-provincial tariffs on the movement of qualified persons trained in different provinces. Then we have the paradox of socialism, which sets out to reclaim power for the people and ends by transferring it to bureaucrats and greatly restricting individual freedom.

The only effective answer to all this contradiction is practical Christianity, in the sense of the Golden Rule. If we love our neighbour as ourself, and are single-minded in our devotion to the public good, we shall seldom be in doubt as to what is the right thing to do in any circumstances.

John Stuart Mill was single-minded, and I am afraid that accounted in part for the shortness of his political career. But long after the politicians of that period are forgotten, his rectorial address to the students of St. Andrews will ring

true and strong. He laid it down that the proper end of their studies was that they should become "more effective fighters in the battle between good and evil".

I wish for you graduands great opportunity for service and great happiness in giving it.

### **Report of the President**

*As presented to Convocation, May 17, 1950*

We have completed the transition from war to peace and from a small to a large university. It is a time for stocktaking, for a re-examination of the purpose of a university, of our success in achieving this purpose, and of the direction we should go from here.

Obviously the purpose of a university is education, but it is not so easy to define the demarcation between education and training. Professional faculties now dominate the university, at least in numbers of students. Students in these faculties must devote a great deal of their time to technical training—but not all, as they, too, seek an education. Training is in large part concerned with techniques, and techniques are notoriously changeable. In ten years current techniques may be entirely replaced, and students not thoroughly grounded in underlying principles may be severely handicapped.

Another question arises from our growth in size. Shall our aim be to have as many students as possible, at the cost perhaps of giving them a mediocre education, or shall we aim to give fewer students a higher standard of education? Probably we must be content with a reasonable compromise. The growing complexity of society demands both a large supply of educated people and that the best minds among them shall be very highly educated.

Another reasonable compromise must be found between conflicting views concerning the high school curriculum and matriculation requirements. We are making a joint study of this question, with the Provincial Department of Education. Our ideal unquestionably should be that the whole system of education, schools and university combined, should bring out the best of which our people are capable.

The schools may have gone a bit astray in trying to keep up with the times, forgetting that the chief characteristic of these times is material advancement, based on science and technology.

True education develops the things of the mind. These are eternal, and even their outward expression does not change rapidly, though progress should gradually widen the gap between the animal kingdom and mankind.

We share with the animal kingdom the need for food, covering for the body, and shelter. In improving our supply of these we may flatter ourselves that we are developing an advanced civilization when, in fact, we are merely making ourselves a superior race of animals.

Mankind is unique, and above the animal kingdom, in possessing the ability to think and to speak. These are the powers our schools and colleges should develop.

This year's valedictorian said yesterday the great thing he and his classmates got from the University was the ability to speak the specialized languages of mathematics, physics, engineering, law, and so on. He was on the right track. I could not help thinking of the day of Pentecost, when the spirit of inspiration descended



on a group of people with an intensity and generality never before experienced. It expressed itself in the ability to speak with other tongues, to communicate effectively to their fellows the great thought which had come to them. That is education.

Shorthand and typewriting, and some other things which have been introduced into our high school curriculum, are highly useful skills for those who need them—but they are not education. It is in developing our capacity to think great thoughts, to produce great ideas, and to communicate these effectively, that we achieve the purposes of education.

Many of you graduands will live to see the year 2000. That is a solemn thought, because so much can happen in half a century nowadays, and you cannot escape either your share of responsibility for it or the consequences. The first half of the twentieth century has been marked by great additions of material power in the hands of mankind, through control over the forces of nature. But these have not saved us from grievous calamities that made this half-century a disappointing and disastrous period. War on a worldwide scale appeared for the first time. It happened twice, and the second time it was total war. This period saw also the first appearance of the atrocious sin of genocide. It saw democracy in eclipse in many countries, and threatened in our own, something we could not have dreamed at the turn of the century. It saw freedom obliterated over a large part of the earth.

In your half of the twentieth century, try cultivating the things of the spirit instead of power, and see if you will not have a happier life than we did. We have shown you how to build good roads, bridges, motor cars, and aeroplanes, but have left you to discover how to use these to bind mankind together in peace and brotherhood. You must learn to speak the word that is "with power", the word that heals. Place the emphasis in education on thought and speech. Worship God and not the atom.

\* \* \* \*

Appended are tabular data concerning academic staff numbers; academic staff appointments and promotions; leave of absence, retirements, and resignations; staff recognition; student registration; gifts; new scholarships, prizes, and medals; staff publications; and excerpts from the reports of the Deans, Directors, Librarian, Provost, Chairman of the Committee on Physical Education, Radio Secretary, and Commanding Officers of Armed Services training units.

**Table I.—Academic Staff Numbers**

*Administrative Officers*

President .....	1
Dean of Business Affairs .....	1
Assistant to the President .....	1
Deans of Faculties .....	7
Directors of Schools .....	4
Director of the Banff School of Fine Arts .....	1
Director of the Calgary Branch, Faculty of Education .....	1
Director of the Summer Session .....	1
Provost .....	1
Assistant Provost, Calgary Branch .....	1
Adviser to Student Veterans .....	1
Adviser to Women Students .....	1
Librarian .....	1
Superintendent of the University Hospital .....	1

Registrar .....	1	
Assistant Registrar .....	1	
Alumni Secretary .....	1	
Bursar .....	1	
Wardens of Residence Halls .....	3	
	<hr/>	30
<i>Full-time Teaching Staff</i>		
Professors .....	48	
Associate Professors .....	34	
Assistant Professors .....	68	
Lecturers .....	54	
Instructors .....	30	
	<hr/>	234
On leave of absence:		
Professors .....	1	
Assistant Professors .....	3	
Lecturers .....	3	
<i>Part-time Teaching Staff</i>		
Professors .....	8	
Associate Professors .....	5	
Clinical Professors .....	12	
Assistant Professors .....	5	
Associate Clinical Professors .....	1	
Assistant Clinical Professors .....	2	
Lecturers .....	27	
Instructors .....	77	
Demonstrators in the Faculty of Education .....	69	
Demonstrators and student assistants .....	210	
	<hr/>	416
On leave of absence:		
Instructors .....	1	
<i>School of Nursing</i>		
Director .....	1	
Superintendent of Nursing Service .....	1	
Supervisor of Instruction .....	1	
Instructors .....	2	
	<hr/>	5
<i>Department of Extension</i>		
Director .....	1	
Agricultural Secretary .....	1	
Librarian .....	1	
Lecturers .....	2	
	<hr/>	5
<i>Library</i>		
Librarian .....	1	
Reference Librarian .....	1	
Chief Cataloguer .....	1	
Order Librarian .....	1	
Assistants .....	5	
Junior Assistants .....	2	
	<hr/>	11
<i>Industrial Laboratories</i>		
Director and Provincial Analyst .....	1	
Assistant .....	1	
	<hr/>	2



<i>Provincial Laboratory of Public Health</i>		
Director and Provincial Bacteriologist .....	1	
Pathologist and Provincial Serologist .....	1	
Assistants .....	2	
	<hr/>	4
<i>Other Academic Staff</i>		
Dietitians .....	3	
Radio Secretary .....	1	
Purchasing Agent .....	1	
Chief Accountant .....	1	
	<hr/>	6
Total .....		713
Less duplicates .....		35
		<hr/>
<i>Total Academic Staff</i> .....		678
		<hr/>

**Table II.—Academic Staff Appointments and Promotions**

*Faculty of Arts and Science*

John Andrew Allan, M.Sc., Ph.D., F.R.S.C., Professor Emeritus of Geology.  
Henry George Glyde, A.R.C.A., R.C.A., from Associate Professor to Professor of Fine Arts.  
Hugh Grayson-Smith, M.B.E., M.A., Ph.D., F.R.S.C., Professor of Physics.  
Douglas Smith, M.A., Ph.D., from Associate Professor to Professor of Psychology.  
John Robert Stuart Jorgens, B.Sc., M.S., Assistant Professor of Farm Management, Department of Political Economy.  
Stewart Clare, B.Sc., M.S., Ph.D., Lecturer in Zoology.  
Arthur Bligh Crighton, Mus. Bac., Lecturer in Music.  
Henri Albert Jordan, Ph.D., Lecturer in Mathematics.  
Esther Nelson, Extension Lecturer in Drama.  
John A. Sawyer, B.Com. M.A., Lecturer in Political Economy.  
William Ruddick Shanklin, M.A., Lecturer in Mathematics.  
Albert Shaw, B.Sc., Lecturer in Mathematics.  
Orest Starchuk, D. Jur. et Rer. Pol., Lecturer in Russian.  
Isabel Victoria Burwash, B.Sc., Sessional Instructor in Botany.  
I. Gislason, B.A., Sessional Instructor in English, Calgary Branch.  
William George Goward, B.Sc., Sessional Instructor in Chemistry.  
Mary Helena Graham, B.A., Sessional Instructor in French, Calgary Branch.

*School of Commerce*

Andrew Stewart, B.S.A., M.A., Director of the School of Commerce.

*School of Household Economics*

Violet Onerva Katainen, B.H.E., M.S., Lecturer in Household Economics.

*Faculty of Agriculture*

Charles Fred Bentley, MSc., Ph.D., Secretary of the Faculty of Agriculture.  
John Patterson Bowland, B.S.A., M.S., Ph.D., Assistant Professor of Animal Husbandry.

### *Faculty of Dentistry*

- Robert Arthur Rooney, D.D.S., from Associate Professor to Professor of Prosthetic Dentistry.  
Kenneth Alan McMurchy, B.A., D.D.S., Lecturer in Operative Dentistry.  
Harris Solomon Wood, D.D.S., Sessional Instructor in Operative Dentistry.

### *Faculty of Education*

- Andrew Leo Doucette, B.Sc., M.A., Ed.D., from Associate Professor to Professor of Education.  
Herbert Edgar Smith, M.A., M.Ed., Ph.D., from Associate Professor to Professor of Education.  
Howard Byron Barnett, A.R.C.T., B.A., Lecturer in Education (Music), Calgary Branch.  
Muriel Adeline Caldwell, Lecturer in Education.  
John Allison Forbes, B.Ed., Lecturer in Education (Art).

### *Faculty of Engineering*

- Ewald Oscar Lilge, M.Sc., from Associate Professor to Professor of Mining and Metallurgy.  
Leroy Allan Thorssen, B.Sc., M.S., from Associate Professor to Professor of Civil Engineering.  
John William Gregg, M.S., Assistant Professor of Petroleum Engineering.  
Donald Quon, D.Sc., Lecturer in Chemical Engineering.  
Anatol Roshko, M.Sc., Sessional Lecturer in Civil Engineering.  
Donald Andrew Bernard, B.Sc., Sessional Instructor in Civil Engineering.  
Ivan Clare Edwards, B.Sc., Sessional Instructor in Mining Engineering.  
John Frederick Hunt, B.Sc., Sessional Instructor in Civil Engineering.  
Donald Edgar Anderson MacKay, B.Sc., Assistant Engineer and Instructor in Civil and Mechanical Engineering.  
Norman Leslie Reid, B.Sc., Sessional Instructor in Civil Engineering.  
George Ford, M.Sc., Ph.D., Secretary of the Department of Engineering.

### *Faculty of Law*

- George William Reed, B.A., Assistant Professor of Law.  
Horace Gilchrist Johnson, LL.B., Sessional Instructor in Commercial Law.

### *Faculty of Medicine*

- Robert McLeod Shaw, B.A., M.D., C.M., D.P.H., F.R.C.P.(C), Professor Emeritus of Bacteriology.  
Ardey Whidden Downs, M.A., M.D., D.Sc., F.A.A.S., F.A.C.P., Honorary Professor of Physiology and Pharmacology.  
Herbert Bruce Collier, M.A., Ph.D., Professor of Biochemistry.  
Howard Havelock Hepburn, M.C., M.D., C.M., F.R.C.S., F.A.C.S., F.R.C.S.(C), Professor of Surgery.  
John Watt Macgregor, B.A., M.D., Professor of Pathology.  
Robert Douglas Stuart, M.B., Ch.B., M.D., D.Sc., D.P.H., F.R.F.P.S., Professor of Bacteriology.  
Morton Eldred Hall, B.A., M.B., Honorary Associate Professor of Pathology.  
Douglas Oliver William Waugh, M.D., C.M., M.Sc., Ph.D., Associate Professor of Pathology.

Bohdan Jelinek, Dip. Ing., D.Sc., M.D., Assistant Professor of Biochemistry.  
 Arthur Bennetts Lamb, B.Sc., M.C.I.C., Assistant Professor of Bacteriology.  
 Walter Raymond Salt, M.Sc., Assistant Professor of Anatomy.  
 Robert Edward Bell, M.D., Lecturer in Clinical Pathology.  
 William Bramley-Moore, M.D., Lecturer in Medical Economics.  
 Maxwell Mordcai Cantor, B.Sc., M.D., F.A.C.P., Lecturer in Medical Jurisprudence.  
 John Hislop Sturdy, M.D., from Instructor to Lecturer in Pathology.  
 James Ernest Carmichael, B.Sc., M.D., C.M., Honorary Instructor in Anaesthesia.  
 Edward Alexander Gain, B.A., M.D., Sessional Instructor in Anaesthesiology.  
 John Ranicar Jackson, M.R.C.S., D.T.M. & H., Sessional Instructor in parasitology.  
 James E. Musgrave, M.D., Sessional Instructor in Clinical Surgery.  
 Douglas Campbell Ritchie, B.Sc., M.D., Sessional Instructor in Obstetrics and Gynecology.  
 Jeanne Ardelle Smeltzer, B.Sc., Sessional Instructor in Bacteriology.  
 Dora Helen Stock, M.A., Sessional Instructor in Physiology.  
 Chaim Harry Wolf Weinlos, B.A., M.D., F.R.C.S.(C), Sessional Instructor in Clinical Surgery.  
 Thomas Sidney Wilson, B.Sc., M.D., F.R.C.S.(C), Sessional Instructor in Clinical Surgery.  
 Kenneth Andrew Connal Clarke, B.Sc., M.D., Demonstrator in Oto-Rhino-Laryngology.  
 Donald Malcolm McDonald, B.Sc., M.D., Demonstrator in Anatomy.  
 Benjamin Morrill Wheeler, M.B.E., M.D., F.R.C.P.(C), Sessional Demonstrator in Clinical Medicine.  
 MacLean Kenneth Young, M.D., Sessional Demonstrator in Clinical Medicine.

#### *School of Nursing*

Helen Gertrude Frances Hamilton, B.S., M.A., R.N., Instructor in the Basic Sciences.  
 Helen Laycraft, B.Sc., R.N., Instructor in Public Health and Health Education.  
 Education.

#### *School of Pharmacy*

Arthur James Anderson, B.Sc., M.S., Lecturer in Pharmacy.

#### *Department of Extension*

Darroch Duncan Campbell, B.Com., B.A., Lecturer in Extension.  
 Eric Wyld Cormack, C.G., O.B.E., B.Sc., Assistant Professor in Extension.

#### *Library*

Emma MacDonald, B.A., B.L.Sc., Library Assistant.

#### *Department of Physical Education*

Elaine Anna Fildes, B.Sc., Instructor in Physical Education.

#### *Other Appointments*

Andrew Stewart, B.S.A., M.A., Dean of Business Affairs.

Dennis Shute, M.B., Ch.B., M.D., D.T.M., Director of the Calgary Branch of the Provincial Laboratory of Public Health.

Earl William Buxton, B.A., B.Ed., Assistant Provost, Calgary Branch.

### **Table III.—Leave of Absence for Advanced Study**

Grace Leslie Duggan, B.Sc., B.Ed., M.S., Assistant Professor of Household Economics (Sabbatical).

Tessa Mae Johnson, A.B., M.S., Assistant Professor of Physical Education.

Victor Ernest Graham, B.A., Assistant Professor of French and English, Calgary Branch.

Eric John Hanson, M.A., Lecturer in Political Economy.

Gordon Edward Myers, M.Sc., Lecturer in Bacteriology.

Ralph Norman McManus, M.Sc., Lecturer in Civil Engineering (Sabbatical).

Margaret MacSteven Hutton, B.A., M.D., Instructor in Obstetrics and Gynecology.

### **Table IV.—Retirements**

Milton Ezra LaZerte, M.A., B.Ed., Ph.D., Dean of the Faculty of Education.

Olive Margaret Fisher, Ph.B., M.A., Associate Professor of Education.

Goldwin Smith Lord, M.A., LL.D., Associate Professor of Education.

Morton Eldred Hall, B.A., M.B., Assistant Professor of Pathology.

James Ernest Carmichael, B.Sc., M.D., C.M., Instructor in Anaesthesia.

### **Table V.—Resignations**

Francis George Winspear, C.A., Professor of Accounting.

Maxwell Mordcai Cantor, B.Sc., M.D., F.A.C.P., Associate Professor of Biochemistry.

Winnifred Hughes, M.A., Ph.D., Associate Professor of Zoology.

Iriny de Buisseret, L. en Droit, Assistant Professor of Modern Languages.

Charles Samuel Burchill, M.A., Assistant Professor of History.

Leonard Cornelius Hawco, B.A., Assistant Professor of Law.

Tessa Mae Johnson, A.B., M.S., Assistant Professor of Physical Education.

Madeline Leila McCulla, B.Sc., M.A., R.N., Assistant Professor of Public Health Nursing and Health Education.

Andrew Stuart Rankin Tweedie, M.A., Assistant Professor of Extension.

Genevieve Twomey, B.A., Assistant Professor of Education.

Donald Alexander Fraser, B.A., Ph.D., Lecturer in Botany.

John Brian Melville Piercy, B.Sc., Lecturer in Extension.

Robert Stuart, Lecturer in Drama.

Frances Gowan, Library Assistant.

### **Table VI.—Staff Recognition**

Henry George Glyde, A.R.C.A., Professor of Fine Arts, appointed Royal Canadian Academician.

Edward Hunter Gowan, B.A., B.Sc., Ph.D., Associate Professor of Physics, elected to a Fellowship in the Royal Meteorological Society.

Morden Heaton Long, M.A., Professor of History, appointed a Fellow of the Royal Society of Canada.

Hector Robert MacLean, D.D.S., Professor of Operative Dentistry, appointed a Fellow of the American College of Dentists.

### Table VII.—Registration

TOTAL REGISTRATION Full and Summer Session and Short Courses	Civilian			Rehabilitation			Totals		
	Male 48-49 49-50	Female 48-49 49-50	Total 48-49 49-50	Male 48-49 49-50	Female 48-49 49-50	Total 48-49 49-50	Male 48-49 49-50	Female 48-49 49-50	Grand Total 48-49 49-50
2101 2258	2336	2462	4437 4720	2176 1500	74 40	2250 1540	4277 3758	2410 2502	6687 6260
							Add Cancellations		106 100
									6793 6360
<b>FULL SESSION</b>									
1. Arts and Science:									
B.A.	62	72	205	68	35	81	130	156	286
B.Sc.	237	205	315 287	160 80	4 2	164 82	397 285	82 94	479 369
B.A., B.Com.	6	7	6	2	1	2	8		8
B.A., B.Ed.	2		2				2		2
B.A., B.Sc. (Eng.)	3		3				3		3
B.A., LL.B.	35	44	39 51	13	1	13	48	4	52
B.Sc., D.S.S.	11	15	11 15	5	1	5	16	7	16
B.Sc., M.D.	61	91	68 101	26	8	29	87	10	97
Pre-dental	12	12	12 12	3		3	15	10	15
B.A. after B.Ed.				1		1	1		1
Totals	427	449	659 677	277 128	20 6	297 134	704 577	252 234	956 811
Partials	6	5	11	9	1	10	15	6	21
2. Agriculture	126	114	130 117	212 146		212 146	388	4 3	342 263
Partials	1	1	1				1		1
3. Commerce	83	74	100 89	142 54	4 3	146 57	225 128	21 18	246 146
Partials				1			1		1
4. Dentistry	20	28	21 30	102 106		102 106	122 134	1 2	123 136
5. Education									
B.Ed.—4 year	101	133	236 306	22 19	1 1	23 20	123 152	136 174	259 326
B.Ed.—3 year	3	1	6 4	126 44	11 4	137 48	129 45	14 7	143 52
B.Ed. in Agric.	3	1	3 1	3	1	3	6	2	6
B.Ed. in H.Ec.							2	1	2
B.Ed. in Ind. Arts									
B.Ed. after B.A., B.Sc., etc.				16 6		16 6	16		16
Jr. E. & I.	6	7	10 11	9 11	1 1	10 12	15 18	5 5	20 23
Sr. E. & I.	61	91	211 300	3		3	64 91	150 209	214 300
	4	4	11 16	1		1	5	7	12
Edmonton—Full Time	178	237	478 638	180 81	13 6	193 87	358 318	313 407	671 725
Partials	21	39	60	13		13	34	39	73

Calgary:	17	13	17	27	34	40	3	...	...	...	...	20	13	17	27	37	40
B.Ed.—4 year	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	1
B.Ed. in H.Ec.	7	9	...	...	7	9	22	21	...	...	...	29	30	...	1	29	30
B.Ed. in Ind. Arts	30	36	...	120	128	156	1	1	...	...	...	31	37	99	120	130	157
Jr. E. & I.	...	1	...	1	2	2	...	...	...	...	...	...	1	2	1	2	2
Sr. E. I.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Calgary—Full Time	54	59	117	149	171	208	26	22	...	1	...	80	81	118	149	198	230
Partials	...	3	...	13	...	16	...	...	...	...	...	...	3	...	13	...	16
Education—Full Time	232	296	417	550	649	846	206	103	...	14	6	438	399	431	556	869	955
6. Engineering:	65	68	1	1	66	69	122	68	...	...	...	187	136	1	1	188	137
Chemical Eng.	70	88	1	1	71	89	149	110	...	...	...	219	198	1	1	220	199
Civil Eng.	53	67	...	...	53	67	149	97	...	...	...	202	164	...	...	202	164
Elect. Eng.	24	16	...	...	24	16	86	43	...	...	...	110	59	...	...	110	59
Mining Eng.	22	68	...	...	22	68	39	41	...	...	...	61	109	...	...	61	109
Petroleum Eng.	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Irrigation Eng.	9	7	1	...	10	7	13	5	...	...	...	22	12	1	...	23	12
Eng. Physics	...	3	...	...	...	3	...	...	...	...	...	98	71	2	...	100	71
Eng. Geology	80	67	2	...	82	67	18	4	...	...	...	899	753	5	2	904	755
Not specified	323	385	5	2	328	387	576	368	...	...	...	...	...	...	...	...	...
Partials	...	1	...	...	...	1	...	2	...	...	...	...	3	...	...	...	3
7. Household Economics:	...	...	81	68	81	68	...	...	...	4	...	...	...	85	68	85	68
B.Sc., H.Ec.	...	...	1	4	1	4	...	...	...	...	...	...	...	1	4	1	4
B.H.Ec.	...	...	82	72	82	72	...	...	...	4	...	...	...	...	72	86	72
8. Law	37	56	...	3	37	59	75	81	...	...	...	...	...	...	3	112	140
9. Medicine	88	66	16	10	104	76	118	117	...	2	4	112	137	18	14	224	197
10. Nursing:	...	...	104	114	104	114	...	...	...	4	2	...	...	108	116	108	116
B.Sc.	...	...	106	124	106	124	...	...	...	1	...	...	...	107	124	107	124
Diploma	...	...	9	10	9	10	...	...	...	...	...	...	...	9	10	9	10
Dip. in Pub. Health	...	...	4	8	4	8	...	...	...	1	...	...	...	4	9	4	9
Dip. in Teach. & Sup.	...	...	223	256	223	256	...	...	...	5	3	...	...	228	259	228	259



Table VII.—Registration—Continued

	Civilian			Rehabilitation			Totals					
	Male 48-49 49-50	Female 48-49 49-50	Total 48-49 49-50	Male 48-49 49-50	Female 48-49 49-50	Total 48-49 49-50	Male 48-49 49-50	Female 48-49 49-50	Grand Total 48-49 49-50			
11. Pharmacy	29	45	18	21	47	66	74	74	2	113		
12. Graduate Studies:												
M.A.	16	21	8	9	24	30	19	29	2	31		
M.Sc. (Arts)	16	18	2	2	18	20	13	25	13	25		
M.Sc. (Agric.)	5	15	1	2	6	17	6	13	6	13		
M.Sc. (Eng.)	19	15	1	...	20	15	4	9	4	9		
M.Sc. (Pharm.)	1	...	...	...	1	...	3	3	3	3		
M.Sc. (Med.)	1	1	...	...	1	1	...	...	...	...		
M.Ed.	22	18	5	7	27	25	44	30	2	46		
Special	13	20	6	4	19	24	11	13	11	13		
B.D.	6	4	1	1	7	5	...	...	...	2		
	99	112	24	25	123	137	100	125	4	104	129	
TOTAL FULL TIME STUDENTS	1625	1187	2812	1275	26	1301	5	1	5	26	26	
13. Auditors	5	4	13	11	18	15	33	25	2	1	36	
14. Partials	48	32	59	57	107	89	1920	1303	57	27	1977	
15. Specials	1517	1665	1111	1258	2628	2923	1920	1303	57	27	1977	
Total in Winter Session	1517	1665	1111	1258	2628	2923	1920	1303	57	27	1977	
I. SUMMER SESSION												
Edmonton	426	475	728	788	1154	1263	236	184	15	13	251	
Calgary	30	30	...	...	30	30	12	11	...	...	12	
Banff School:	23	17	42	25	65	42	...	...	...	...	...	
Univ. credit	82	59	437	391	519	450	4	1	1	...	5	
Non-Univ. credit:	6	...	13	...	19	...	...	...	...	...	...	
Banff	...	...	...	...	...	...	...	...	...	...	...	
Jasper	...	...	...	...	...	...	...	...	...	...	...	
	567	581	1220	1204	1787	1785	252	196	16	13	268	209
II. SHORT COURSES												
Dip. in Dairying	17	12	...	...	17	12	4	1	...	4	1	...
Nurs. Adv. Obstet.	...	...	5	...	5	...	...	...	1	...	1	...
GRAND TOTALS	2101	2258	2336	2462	4437	4720	2176	1500	74	40	2250	1540
	4277	3758	2410	2502	6687	6260	4277	3758	2410	2502	6687	6260

Table VIII.—Distribution of Students According to Pattern, Honors or Branch

	1st Year		2nd Year		3rd Year		4th Year		Total	
	48-49	49-50	48-49	49-50	48-49	49-50	48-49	49-50	48-49	49-50
<b>ARTS AND SCIENCE</b>										
<b>Pattern—B.A.:</b>										
English	13	10	22	11	9	16	...	...	44	37
Fine Arts	10	7	8	4	1	7	...	...	19	18
Foreign Language or Lit.	9	8	10	11	14	7	...	...	33	26
History	2	4	8	4	11	7	...	...	21	15
Phil. or Psych.	22	27	28	22	32	27	...	...	82	76
Political Economy	5	1	14	15	12	7	...	...	31	23
No pattern	...	...	...	...	7	2	...	...	7	2
<b>Pattern—B.Sc.:</b>										
Chemistry	17	11	44	9	44	43	...	...	105	63
Mathematics	3	3	1	2	4	1	...	...	9	6
Physics	8	2	2	8	17	5	...	...	27	15
Geology	19	36	28	15	25	21	...	...	75	76
Botany	...	...	1	1	3	...	...	...	4	4
Entomology	...	1	3	1	1	2	...	...	...	3
Zoology	13	14	22	11	19	26	...	...	54	51
Special Biological	11	17	15	11	16	15	...	...	43	43
No pattern	...	...	...	...	24	8	...	...	24	8
<b>Honors:</b>										
Biochemistry	1	3	...	1	1	...	...	...	2	5
Botany	...	...	1	...	...	...	...	...	1	...
Chemistry	12	8	14	9	11	8	...	...	53	36
Classics	...	1	1	1	1	1	...	...	3	2
Conservation Biology	...	...	...	1	...	...	...	...	...	...
English	2	6	4	2	2	3	...	...	4	8
Geology	...	...	1	1	11	9	...	...	23	25
History	...	1	2	2	4	...	...	...	8	4
Mathematics	...	6	2	2	2	4	...	...	12	13
Modern Languages	...	...	2	4	4	6	...	...	23	20
Philosophy	...	...	2	...	1	2	...	...	3	3
Psychology	...	...	2	...	3	...	...	...	8	1
Physics	...	4	9	5	14	4	...	...	43	20
Political Economy	...	...	3	1	4	1	...	...	11	4
Business Administration	...	...	...	...	...	...	...	...	...	1
<b>ENGINEERING</b>										
Civil	*14	15	54	49	91	47	...	...	220	199
Chemical	*15	13	48	24	66	40	...	...	188	137

	1st Year		2nd Year		3rd Year		4th Year		Total	
	48-49	49-50	48-49	49-50	48-49	49-50	48-49	49-50	48-49	49-50
Electrical .....	* 8	13	54	26	86	47	54	78	202	164
Mining .....	* 5	2	20	6	33	18	52	33	110	59
Petroleum .....	*20	39	25	25	16	29	...	16	61	109
Irrigation .....	*	...	...	...	...	...	...	1	...	1
Engineering Physics .....	* 3	...	...	...	10	2	10	10	23	12
Engineering Geology .....	*	...	...	...	...	2	...	...	...	3
Not specified .....	100	71	...	...	...	...	...	...	100	71

\*Indicates intention only. All first year students in Engineering registered in general course.

Table IX.—Distribution of Full-time Students According to School or Faculty and Year of Course

School or Faculty	1st Year		2nd Year		3rd Year		4th Year		5th Year		Totals
	48-49	49-50	48-49	49-50	48-49	49-50	48-49	49-50	48-49	49-50	48-49 49-50
Arts and Science .....	265	298	325	225	298	234	66	55	2	1	956
Agriculture .....	45	35	74	34	123	69	100	125	...	...	342
Commerce .....	69	39	69	37	104	70	4	...	...	...	246
Dentistry .....	27	35	25	27	51	24	20	50	...	...	123
Education .....	474	576	179	170	139	126	73	60*	...	...	136
Engineering .....	165	153	201	129	302	186	236	287**	...	...	869
Household Economics .....	29	25	25	23	32	24	...	...	...	...	955
Law .....	55	50	40	54	17	36	...	...	...	...	86
Medicine .....	50	48	52	50	44	57	34	42	44	...	72
Nursing .....	83	95	48	72	51	39	17	21	29	32	112
Pharmacy .....	48	29	40	44	35	39	...	...	...	...	123
Totals .....	1310	1383	1078	865	1196	904	550	640	75	33	4213
ADD: School of Graduate Studies											3848
B.D. ....											220
Auditors .....											7
Specials .....											23
Partials .....											15
Totals .....											9
Totals .....											142
Totals .....											115
Totals .....											4605
Totals .....											4253

\*Plus 23 unclassified graduates of other faculties seeking B.Ed. degree.

\*\*Plus 4 unclassified.

**Table X.—Distribution of Students According to Home Address and Birthplace**

	Home Address	Birthplace
<b>A. British Empire—Commonwealth:</b>		
(a) <b>Canada</b>		
Edmonton .....	1606	718
Calgary .....	522	485
Lethbridge .....	102	121
Medicine Hat .....	43	63
Red Deer .....	41	37
Vegreville .....	22	48
Wetaskiwin .....	23	31
Camrose .....	21	25
Cardston .....	20	48
Other Alberta points .....	1579	1593
Total from Alberta .....	3979	3169
Newfoundland .....	1	1
Nova Scotia .....	4	14
Prince Edward Island .....	1	6
New Brunswick .....	1	4
Quebec .....	1	18
Ontario .....	16	83
Manitoba .....	23	121
Saskatchewan .....	129	415
British Columbia .....	82	124
Yukon and North West Territories .....	1	3
Canada—not otherwise specified .....	—	9
(b) <b>Other Parts of the British Empire—Commonwealth:</b>	4238	3967
British Isles .....	—	70
Dominions .....	—	5
Crown Colonies .....	4	3
	4	78
<b>B. Countries Outside the British Empire</b>		
—Commonwealth:		
United States of America .....	3	64
Poland and Czechoslovakia .....	1	60
Russia and Ukraine .....	—	19
Balkan States (Yugoslavia, Roumania, Bulgaria, Albania, Greece, Turkey) .....	—	11
Scandinavian States (Sweden, Norway, Denmark, Iceland) .....	—	8
Germany, Austria .....	—	10
France .....	—	1
Hungary .....	—	8
China and Japan .....	1	2
Others .....	3	17
Not specified .....	3	8
	11	208
	4253	4253

**Table XI.—Distribution of Students According to Sex and Marital Status**

Rehabilitation Students				
Male:		Female:		
Single .....	567	Single .....	26	
Married .....	734	Married .....	1	
Divorced .....	1			
Widowed .....	1	Total .....	1330	
Non-Veteran Students				
Male:		Female:		
Single .....	1554	Single .....	1220	
Married .....	110	Married .....	31	
Divorced .....	1	Divorced .....	2	
		Widowed .....	5	
			2923	
Grand Total .....			4253	

## Table XII.—Gifts

From the National Research Council, \$34,703.07 in accountable advances for research work under the direction of the following staff members: Dr. C. F. Bentley, \$1,552.60; Dr. R. K. Brown, \$800; Dr. H. B. Collier, \$2,375; Dr. W. G. Corns, \$1,270.90; Dr. S. G. Davis, \$215.79; Dr. G. W. Govier, \$650; Dr. E. H. Gowan, \$2,000; Dr. H. Grayson-Smith, \$250; Dean R. M. Hardy, \$1,587; Dr. W. E. Harris, \$1,251.27; Dr. A. W. Henry, \$2,014.95; Dr. R. J. Hilton, \$500; Dr. E. O. Hohn, \$1,111.35; Dr. B. Jelinek, \$375; Dr. L. P. V. Johnson, \$1,630; Dr. J. L. Morrison, \$750; Dr. A. G. McCalla, \$3,050; Dr. K. B. Newbound, \$300; Dr. J. D. Newton, \$2,300; Dr. R. B. Sandin, \$850; Dr. D. B. Scott, \$1,797.40; Dr. W. C. Stewart, \$281.31; Dr. H. R. Thornton, \$400; Dr. J. Tuba, \$3,550; Dr. J. Unrau, \$1,000; Dr. O. J. Walker, \$1,915; F. W. Wood, \$925.

From the National Cancer Institute of Canada, grants in aid of cancer research under the direction of the following staff members: Dr. R. K. Brown, \$850; Dr. H. E. Rawlinson, \$2,612.36; Dr. R. B. Sandin, \$4,000; Dr. J. Tuba, \$2,500.

From the Department of National Health and Welfare, through Dr. A. Somerville of the Provincial Department of Health, research grants of \$3,900 to Dr. E. Silver Keeping and \$3,550 to Dr. E. H. Moss.

From the Alberta Division of the Canadian Cancer Society, \$2,500 to endow a bed in the University Hospital for clinical research in cancer and \$2,500 to purchase equipment; a research grant of \$700 to Dr. R. B. Sandin; \$500 to the Department of Pathology to build up a film library for teaching purposes, particularly in the field of cancer; \$350 to enable Dr. H. E. Duggan to attend a special course on the medical aspects of nuclear energy; \$300 to help Dr. H. E. Rawlinson attend a conference on basic cancer research organized by the American Association for the Advancement of Science.

From the John and Mary R. Markle Foundation, the second annual instalment of \$5,000 in support of the scholarship for medical teaching and research awarded to Dr. D. R. Wilson.

From Central Mortgage and Housing Corporation, \$5,000 in renewed support of Prairie Rural Housing Committee research under the direction of Dean R. M. Hardy.

From an anonymous donor, \$4,000 for cancer research under the direction of Dean J. W. Scott.

From the Barley Improvement Institute, \$3,000 for research in the Department of Plant Science.

From the Alberta Tuberculosis Association, \$3,000 for Dr. Tuba's research in the Department of Biochemistry.

From the Consolidated Mining and Smelting Company of Canada, Limited, \$3,000 for research on the nutritive value of crops produced on grey wooded soils in the Department of Soils.

From the Defence Research Board, grants of \$2,350 to Dr. D. E. Smith and \$500 to Professor B. Hocking.

From the Alberta Seed Growers' Co-operative, \$2,000 for research on problems of forage seed production in the Department of Plant Science.



From the Division of Entomology, Dominion Department of Agriculture, \$2,000 for a research project under the direction of Dr. J. H. Stirrat.

From North American Cyanamid Ltd., \$1,200 to assist research on chemical defoliation in the Department of Plant Science; also \$700 in aid of investigations on straw decomposition in the Department of Soils.

From the Canadian Foundation for the Advancement of Pharmacy, \$1,000 in support of graduate research in the School of Pharmacy during the summer months; also \$750 for a teaching fellowship.

From Maple Leaf Milling Co., Limited, a grant of \$1,200 for work in the Department of Plant Science on the improvement of varieties of soft wheat in southern Alberta.

From Purity Flour Mills Co., Limited, \$1,200 for research in the Department of Plant Science on white spring wheat in Western Canada.

From the United Grain Growers Limited, \$500 in continuing support of the oil seed research program in the Department of Plant Science; also \$300 to assist turkey research in the Department of Animal Science.

From the Robert Tegler Trust, \$500 for research in the Department of Medicine on the use of Vitamin B<sub>12</sub> in treatment of multiple sclerosis.

From Line Elevators Farm Service, \$500 for investigations on winter wheat in the Department of Plant Science.

From Science Service, Dominion Department of Agriculture, \$450 as the final payment for 1949-50 on the co-operative ecological survey of Northern Alberta, under the direction of Dr. E. H. Moss.

From the Dow Chemical Company, 50 lbs. of d<sub>1</sub>-Methione, worth approximately \$450, for use in poultry research in the Department of Animal Science.

From the Oilvie Flour Mills Co., Limited, \$250 for research on white spring wheat in the Department of Plant Science.

From Jefferies & Sons Limited, \$200 for concrete research in the Department of Civil Engineering.

From the Department of Veterans Affairs, through Mr. H. Allam, District Superintendent of the Soldier Settlement and Veterans' Land Act, \$70 for research work in the Faculty of Agriculture, in appreciation of assistance to a short course given by staff of the Faculty.

From Imperial Oil Limited, \$2,000 for the construction of a potentiometric reservoir model for use in petroleum engineering instruction.

From the College of Physicians and Surgeons, of Alberta, \$400 to purchase books for the Medical Library, to cover annual grants for 1949 and 1950.

From Mr. Claude Gallinger, a Shorthorn steer calf.

From Messrs. G. H. MacDonald and A. W. Haddow, \$83.37, the residual funds of the former Universities Association, to be added to the Students' Union Building furnishing fund.

From the Southern Alberta Co-operative, \$50.00 to initiate a trust fund for the purchase of a mass spectrometer for the Department of Soils.

From Mr. T. W. Bull, a collection of curios brought from the Belgian Congo by Miss Mary Cork.

From the Dominion Bridge Company, a photograph of the Lions Gate Bridge for the Faculty of Engineering.

From Mr. Garth Morse, a self-portrait of the late Dr. E. L. Pope.

From Mr. and Mrs. F. A. Ortner, a steel engraving of a Hamlet scene by Maclise.

From the Rankin Medical Reporting Club, a photograph of the late Dr. John W. Bridge, to hang in the Medical Library.

From the Class of 1950, \$110 towards the cost of erecting an outdoor bulletin board on the Campus.

From Monsignor A. M. Parent, six volumes of French-Canadian literature for the library of the Oral French section of the Banff School of Fine Arts.

From Mr. Hugh Banderob, \$50.00 for the Banff School of Fine Arts.

From the Alberta Wheat Pool, \$1,000 to assist the building program of the Banff School of Fine Arts.

From Mrs. S. H. McCuaig, her half-interest in the library of Canadiana originally owned by her father, the late Chancellor A. C. Rutherford.

From Mrs. W. N. Watson, a further collection of books on economics from the library of the late William Newton Watson.

From Mrs. G. M. Smith and Mr. B. Spooner, the personal library of the late Dean George Malcolm Smith.

From Mrs. Robert Newton, Professor R. K. Gordon, Mr. Ernest Brown, Dr. D. A. Keys, Mr. H. R. Milner, Dr. D. M. Healy, Miss Elizabeth Walker, the Calgary Associate Clinic, and Dr. C. A. Berner, books for the Library.

From the Friends of the University, a total of \$2,766, as follows: Burns & Company Limited, \$500; Mr. H. R. Milner, \$250; Model Dairies, \$200; Mr. John Dower, \$100; Edmonton Journal, \$100; T. Eaton Co. Ltd., \$100; Weisler's Limited, \$100; other donors, \$1,416.

### **Table XIII.—New Scholarships, Prizes and Medals**

#### *Available to University of Alberta Students*

From Mr. Thomas Usher, \$2,000 as the first instalment of "The Dorothy Jean Usher Memorial Scholarship" fund of \$10,000, the income from which is to be used for a research scholarship of \$275 per annum in the field of medicine, preferably relating to Leukemia, also \$275 to enable award of this scholarship in the 1949-50 session.

From the City of Edmonton, six annual scholarships of \$300 each, one matriculation and two undergraduate scholarships restricted to Edmonton residents, and one matriculation and two undergraduate scholarships not restricted to Edmonton residents.

From the Women's Auxiliary of the University Hospital, a \$500 scholarship for advanced study to be awarded annually to a graduate of the School of Nursing.

From Mr. Fred Stapells, an annual scholarship of \$250 for graduate study in language, literature or the social sciences.

From the Can-Tex Drilling Company, \$5,000, the income from which is to be

used for an annual scholarship for the matriculating student writing the best essay on relations between Canada and the United States.

From the College of Physicians and Surgeons, six annual scholarships of \$200 each, replacing the five prizes formerly given, for award to students in the Faculty of Medicine.

From the Alberta Tuberculosis Association, an increase in the fellowship offered from \$500 to \$1,200, plus a ten-year subscription to the American Review of Tuberculosis; also replacement of two prizes of \$75 and \$25 by one of \$100, plus a three-year subscription to the American Review of Tuberculosis.

From the Ladies' Auxiliary of the Canadian Legion B.E.S.L., Saskatchewan Command, a scholarship of \$100 to a student of their choice.

From the Alumnae Association of the University of Alberta School of Nursing, the annual prize for general proficiency in the immediate year of Nursing, formerly offered by the late Dr. E. L. Pope, increased from \$10.00 to \$15.00.

From the Edmonton Home Economics Association, an annual prize of \$15.00 to be awarded to the student in the School of Nursing obtaining the highest standing in the course in Foods and Nutrition.

From the Oilfield Technical Society, a prize of \$25.00 in books for the third-year student in Petroleum Engineering who has attained the highest scholastic record and who has not won any financial award.

From the Government of France, \$125 and several books for award to students in the Oral French section, of the Banff School of Fine Arts.

From Dr. Max Wyman, "The A. Wyman Memorial Gold Medal in Mathematics", for annual award to the student who makes the highest average in the graduating year of the Honors Mathematics program.

From Chief Justice G. B. O'Connor, a silver medal to be awarded annually to the student coming second over the whole Law course.

#### *Available to Western Board of Music Students*

From the Red Deer Music Association, a prize of \$25.00.

From Radio Edmonton Limited, a prize of \$25.00.

From the Girls' Club of Glendon, Alberta, a prize of \$5.00.

From the Parent-Teacher Association of Glendon, Alberta, a prize of \$5.00.

### **Table XIV.—Staff Publications**

#### *Department of Anatomy*

Rawlinson, H. E. Iron deposition in spontaneous mammary tumours in dba mice. *Acta Union Int. Contre Cancer* 6:744-748. 1949.

Rawlinson, H. E., and Pierce, G. B. The iron content as a quantitative measurement of the effect of previous pregnancies on the mammary glands of mice. *Endocrinol.* 46:426-433. 1950.

Rawlinson, H. E. The use of an iron stain for the study of alveolar development in the mouse mammary gland. *Can. J. Res. E*, 28:1-4. 1950.

Shaner, R. F. Malformation of the atrio-ventricular endocardial cushions of the embryo pig, and its relation to defects of the conus and truncus arteriosus. *Am. J. Anat.* 84:431-456. 1949.

### *Department of Animal Science*

- Bowstead, J. E. Care and feeding of dairy cattle. Univ. Alta. Bull. No. 41. Rev. 1949.
- Bowstead, J. E. Sheep production in Alberta. Univ. Alta. Bull. No. 52. 1949.
- Draper, H. H., and McElroy, L. W. A study of nutritional anemia in suckling pigs. Sci. Agr. 29:370-375. 1949.
- McElroy, L. W., and Draper, H. H. Feeding grains of different protein content to growing pigs. Sci. Agr. 29:579-583. 1949.
- McElroy, L. W., and Draper, H. H. Effect of inadequate brood sow rations on the prenatal and postnatal development of the progeny. Sci. Agr. 30:172-182. 1950.
- Spencer, E. Y., Robinson, A. D., McElroy, L. W., and Kastelic, J. Collaborative analysis of wheat, oats, and barley for thiamine and riboflavin. Can. J. Res. F, 27:194-198. 1949.
- Staff. Twenty-eighth annual feeders' day report. Press Bull. 1949.
- Williams, S. B., Sylvestre, P. E., Bowstead, J. E., Ewen, A. H., Myhr, P. I., and Peters, H. F. Supplemental feeding of pregnant ewes. Sci. Agr. 30:1-11. 1950.

### *Department of Biochemistry*

- Fraser, R. S. Blood ergothioneine levels in diabetes mellitus. J. Lab. Clin. Med. 34:960-967. 1950.
- Hunter, G., Molnar, G. D., and Wight, N. J. An ergothioneine: Its preparation from blood and ergot. Can. J. Res. E, 27:226-229. 1949.
- Hunter, G. The determination of ergothioneine in simple solution and in blood. Can. J. Res. E, 27:230-239. 1949.
- Hunter, G., Fushtey, S. G., and Gee, D. W. Note on the ergothioneine content of ergot from different plant hosts. Can. J. Res. E, 27:240-243. 1949.
- Hopkins, R. H., and Jelinek, B. Action of beta-amylase on amylose. Nature 164: 955. 1949.
- Tuba, J., and Shaw, R. K. The relationship of dietary factors to rat serum alkaline phosphatase. I. The effect of fat, methionine, and cystine. Can. J. Res. E, 28:41-46. 1950.
- Tuba, J., and Hoare, R. On rat serum lipase. I, A simple micromethod for estimation of lipase activity in rat serum. Can. J. Res. E, 28:106-112. 1950.

### *Department of Botany*

- Cormack, R. G. H. The development of root hairs in Angiosperms. Bot. Rev. 15:583-612. 1949.
- Moss, E. H. Natural pine hybrids in Alberta. Can. J. Res. C, 27:218-229. 1949.

### *Department of Chemistry*

- Allen, W. F., and Beamish, F. E. Fire assay and gravimetric determination of rhodium. Anal. Chem. 22:451-454. 1950.
- Christiansen, R. G., and Sandin, R. B. The rates of dissociation of 1,1,1,2-Tetraphenyl-2-(4-hydrindenyl)-ethane. J. Am. Chem. Soc. 71:3543. 1949.
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- Waslewsky, A., Brown, R. K., and Sandin, R. B. Preparation of 4-nitrodiphenylene iodonim chloride. J. Am. Chem. Sec. 72:1038. 1950.

#### *Department of Civil Engineering*

- Ayre, R. S., Ford, G., and Jacobson, R. S. Transverse vibration of a two-span beam under action of a moving constant force. J. Appl. Mech. 17(1):1-12. 1950.
- Hardy, R. M. Low cost pavements. Civic Administration 28-30. Sept. 1949.
- Hardy, R. M. The compaction of soils. Proc. 30th Annu. Convention of Can. Good Roads Assoc. 13-20. 1949.

#### *Department of Dairying*

- Lubert, D. J., Smith, L. M., and Thornton, H. R. An extraction-titration method for the estimation of bacterial lipase. Can. J. Res. F, 27:491-498. 1949.
- Lubert, D. J., Smith, L. M., and Thornton, H. R. Lipase activity in cultures of microorganisms and in cheese. Can. J. Res. F, 27:499-503. 1949.
- Lubert, D. J., Smith, L. M., and Thornton, H. R. Lipolytic activity of *Pseudomonas fluorescens*. Can. J. Res. F, 27:504-509. 1949.
- Smith, L. M., Lubert, D. J., and Thornton, H. R. An extraction-titration method for the estimation of milk lipase. Can. J. Res. F, 27:483-490. 1949.

#### *Department of English*

- Scargill, M. H. All passion spent: A revaluation of *Jane Eyre*. Univ. Toronto Quart. 19:120-125. Jan. 1950.

#### *Department of Entomology.*

- Hocking, B. *Hornia minutipennis* Riley: A new record and some notes on behaviour. Can. Ent. 81:61-66. 1949.
- Hocking, B. Agricultural chemicals and the beekeeper. W. Can. Beekeeper, 12(10):3-7. 1949.
- Hocking, B., Richards, W. R., McDuffie, W. C., and Twinn, C. R. Observations on the bionomics of some northern mosquito species. Can. J. Res. D, 28:58-80. 1950.
- Hocking, B. On the effect of crude benzene hexachloride on cereal seedlings. Sci. Agr. 30:183-193. 1950.
- Hocking, B. The honey bee and agricultural chemicals. Bee World, 31(7):49-53. 1950.



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#### *Department of Geology*

Folinsbee, R. E. Determination of the reflectivity of the ore minerals. Econ. Geol. 36(5):425-436. 1949.

Folinsbee, R. E., and Moore, J. C. Matthews Lake map-area. Preliminary paper No. 50-2. Geological Survey of Canada. 1950.

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#### *Department of Mathematics*

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#### *Department of Mining*

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#### *Department of Nursing*

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Lang, M. G. Therapeutic dietetics in treatment. Can. Hosp. 27:43-44. 1950.

#### *Departments of Obstetrics and Gynecology, and Pathology*

Bell, D. M., Macgregor, J. W., and Vant, J. R. The use of the male frog, *Rana pipiens*, as biological test for early pregnancy. Can. Med. Assoc. J. 62:68-71. 1950.

#### *Department of Pharmacy*

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- Sprague, W. H. Report of Sub-Committee on Pharmaceutical Economics. *Proc. Can. Conf. Pharm. Faculties,* 6:45-48. 1949.

#### *Department of Philosophy and Psychology*

- Macdonald, J. Review of *Reason and Unreason in Society: Essays in Sociology and Social Philosophy*, by Morris Ginsberg, Cambridge, Harvard Univ. Press, 1948. *Can. J. Econ. and Pol. Sci.* 16(1):109-111. 1950.

#### *Department of Physics*

- Armstrong, L. D., and Grayson-Smith, H. High temperature calorimetry. II. Atomic heats of chromium, manganese and cobalt between 0° and 800°C. *Can. J. Res. A,* 28:51. 1950.
- Erdman, K. L., Kokotailo, G. T., and Scott, D. B. Positive particles associated with beta-ray emitters. *Phys. Rev.* 76:1262. 1949.
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- Klinkenberg, P. F. A., and Lang, R. J. The spectrum of trebly ionized thorium. *Phys.* 15(8). 1949.
- McCutcheon, K. B. A simplified periodic classification of the elements. *J. Chem. Educ.* 27:17. 1950.
- Newbound, K. B. Refractive indices of water vapor and carbon dioxide at low pressure. *J. Opt. Soc. Am.* 29:835. 1949.

#### *Department of Physiology and Pharmacology*

- Hohn, E. O., and Robson, J. M. Mode of action of oestrogens on the corpus luteum. *Endocrinal.* 44:536. 1949.
- Hohn, E. O. Seasonal changes in the thyroid gland and effects of thyroidectomy in the mallard in relation to moult. *Am. J. Physiol.* 158:337. 1949.
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#### *Department of Plant Science*

- Corns, W. G. Effects of 2,4-D and soil moisture on the catalase activity,

respiration and protein content of bean plants. *Can. J. Res. C*, 28:393-405. 1950.

Gilpatrick, J. D., and Henry, A. W. The effect of nutritional factors and the development of *Ophiobolus graminis* Sacc. *Proc. Can. Phytopath. Soc.* 17:14. 1950.

Grant, M. N., and McCalla, A. G. Yield and protein content of wheat and barley. I. Interrelation of yield and protein content of random selections from single crosses. *Can. J. Res. C*, 27:230-240. 1949.

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#### *Department of Political Economy*

Hanson, E. J. Local government reorganization in Alberta. *Can. J. Econ. Pol. Sci.* 16(1): 53-62. 1950.

Mayo, H. B. Newfoundland's entry into the Dominion. *Can. J. Econ. Pol. Sci.* 15(4): 505-523. 1949.

#### *Department of Soils*

Odynsky, W., Newton, J. D., and Brown, A. L. Soil survey of Rycroft and Watino sheets. *Alta. Soil Survey Rep.* No. 15. 1950.

#### *Department of Surgery and Clinical Surgery*

Hepburn, H. H. Industrial disability due to low back pain and sciatica. *Proc. Annu. Meeting Assoc. Workmen's Compensation Bds.* *Can.* September, 1949.

#### *Department of Zoology*

Miller, R. B. Recognition of trout in Alberta. *Can. Fish Culturist*, 6:23-25. 1950.

Miller, R. B. Observations on mortality rates in fished and unfished cisco populations. *Trans. Am. Fish. Soc.* 79:180-186. 1950.

Miller, R. B., and Macdonald, W. H. Preliminary biological surveys of Alberta watersheds, 1947-1949. *Dept. Lands and Forests, Prov. Alta.* 139 pp. 1950.

### **Report of Dean John Macdonald of the Faculty of Arts and Science**

#### *Recommendations for Degrees*

The number of students recommended for degrees at the Convocation of May 16, 1950, is as follows:

For the B.A. degree .....	119
For the B.Sc. degree .....	174

### *Progress During the Session*

The total registration for B.A., B.Sc., School of Commerce, School of Household Economics and pre-professional courses shows a decrease of 270. This is accounted for in the main by the practical disappearance of veterans from this faculty.

A new course, Physical Science 41, which was instituted to meet the needs of B.A. students specifically, has operated this session for the first time under the supervision of Dr. Folinsbee of the Department of Geology. The general conduct of the course is under a small standing committee whose function it will be to report on this new venture from time to time. So far the reports I have received are satisfactory.

The only matter of special importance that engaged the attention of the Faculty during the session was matriculation requirements. The Faculty of Arts and Science, along with other faculties, has been reconsidering these requirements at the request of a committee of the Senate which was instituted several years ago to investigate the matter of articulation between the University and the high schools. At the moment, a specific proposal for a six-unit matriculation is under consideration by a committee of General Faculty Council which has already met with a committee appointed by the Department of Education. At least one further meeting will be needed before the committee is in a position to report back to the Council. It is not yet clear exactly how the work of the Faculty of Arts and Science will be affected by any changes that are made.

### *Departmental Reports*

*Botany*—During the current session, instruction has been given to approximately 450 students, enrolled in nine courses.

Research has continued along the same lines as in the previous year. Of special interest is an aerobiological survey designed to secure information that doctors may use in treating patients afflicted with hay fever and similar allergies. During the past summer the work was supported by a University Medical Research Grant and was carried out in the Edmonton area. With the aid of a Federal Public Health Research Grant, the survey is presently being extended to give a wide coverage of the Province.

Dr. Cormack was invited to speak at a special school in Banff for forestry officers and wardens of the Province and the National Parks.

*Chemistry*—Dr. Walker reports a decrease in the number of students taking classes in this department, but even with this decrease the number is still nearly twice as large as it was in pre-war years. There is still a large number of students registered for Honours, about forty being in one year or another of the four-year program at the moment.

All members of the department are actively engaged in research which, Dr. Walker reports, has been supported generously by the National Research Council, the Research Council of Alberta, the Defence Research Board and the National Cancer Institute of Canada. Dr. Walker had five students working during the summer of 1949 on the fundamental properties of Alberta cereal straws. This research program is now complete and is being written up for publication. Dr.

Sandin has continued his research on the preparation of carcinogenic compounds and antibiotics. He has six students working with him on these problems throughout the year and some of his preparations have already been tried out at the University of Wisconsin with promising results. He has been invited to teach at that University during the summer, but his research program may not make it possible for him to accept. Dr. J. L. Morrison is carrying out research on the interaction of dyes and serum proteins and is assisted by several research students. Dr. S. G. Davis is working on the adsorption of mercaptans by charcoal, an investigation which is carried on in collaboration with the Petroleum Division of the National Research Council. Dr. W. E. Harris is continuing his work on the effect of higher mercaptans in the production of synthetic rubber. Dr. R. K. Brown is continuing his research on the properties of cellulose as well as on the preparation of certain carcinogenic compounds. Dr. W. F. Allen of the Calgary Branch is beginning a research program dealing with the effects of traces of cobalt on certain organs of the body.

Two of the sessional instructors, L. R. Melby and R. B. Brown, have been awarded substantial scholarships at the University of Illinois and the University of Wisconsin respectively.

*Classics*—Dr. Hardy reports that the registration in this department continues to be large. He further reports that three of the advanced students in this department have received recognition from outside. Miss Marie Spence will graduate this spring in Honours Classics and has accepted a fellowship from Bryn Mawr College and will proceed there for higher studies. Robert Buck, B.A., who is holding a post graduate fellowship at the University of Kentucky, is reported as making excellent progress.

Dr. Hardy reports further that the two \$2,000 scholarships which were donated by the Hockey Association for a study abroad in Drama, Music and Painting, have now been supplemented by two \$1,000 scholarships for the same purpose.

Members of the department gave certain addresses on classical and educational subjects during the year. Special mention may be made of the five lectures to the Ontario Educational Association which Dr. Hardy gave in Toronto in April.

*English*—Dr. Gordon reports that the registration in this department continues large. There were over 500 students in English 2 and the senior classes were also very large.

Mr. J. K. Johnstone, a graduate student in English and a part-time instructor, has been awarded an I.O.D.E. scholarship and hopes to go to England in the fall of 1950 for two or three years. Two members of the department (A. A. Ryan and J. K. Heath) are finishing doctoral theses. Dr. Scargill is publishing with the Princeton University Press a translation of an Icelandic Saga. Professor Salter has been invited to attend a conference of professors of English at Magdalen College, Oxford, next August. During his leave of absence next session, he hopes to complete work on his edition of the Chester Plays. This will be a valuable contribution to medieval studies.

### *Fine Arts*

*Music Division*—Mr. Eaton has reported directly on the work of the Western Board. So far as the Division of Music itself is concerned, his report shows an

increase in the total number of students taking music which is due apparently to the registrations from the Faculty of Education.

So far as campus activities are concerned, the choral laboratory students assisted once more in the presentation of the annual Christmas Carol Service at St. Stephen's College in December. Regular radio broadcasts over CKUA were given by students of the appreciation laboratory under the direction of Mr. A. B. Crighton.

In the extension field, a special course in music appreciation was given on the campus for three months by Mr. Crighton. It attracted a registration of over 50 persons. Further, it was decided to offer in Red Deer during the months of February, March and April the same choral leadership course which was given with success on the campus the previous year. It had a large enrolment (41), which included individuals not only from Red Deer but from neighboring towns. Mr. Eaton handled this course.

The University Mixed Chorus again had another successful session. In addition to the concerts which have been given in Edmonton and Calgary, Mr. Eaton is planning to bring the chorus to eight towns in the south of the province after final examinations have been written.

*Painting Division*—Mr. Glyde reports a busy and successful session both on the campus and in extension work. He also reports a successful year with exhibitions. Heavy commitments were made in the extension field with the result that four part-time instructors had to be used. They helped with both the out-of-town and city classes. There were sixteen centres operating outside of Edmonton from October until April. The centres were representative of the province generally. The classes were mainly adult but many high school students attended. The approximate enrolment was 200 students in the Edmonton centre and 290 outside of Edmonton.

Mr. Glyde spent the summer of 1949 in England studying the methods of approach in the teaching of art forms. It should also be reported that he was elected full Academician in November at the annual meeting of the Royal Canadian Academy. Professor Glyde also reports that the Fine Arts Department is designing a mural for the new Library. The mural will depict the early history of Alberta.

*Drama Division*—This session, for the first time, the Drama Division has had a fully equipped stage and workshop and the change has brought about an increase in the students interested and a general raising of the quality of the work. During the session, two performances were given in the Studio Theatre. They were *Henry IV* by Pirandello and the *Antigone* of Sophocles. Both were generally judged to be highly successful.

*Geology*—Dr. Warren reports that the Department of Geology continues to attract students in very large numbers. A large number of B.Sc. students are interested in this subject, and the increased numbers in Engineering and especially the degree course in Petroleum Engineering have made increased demands on the teaching resources of the department. There appears to be little evidence that the total number of students taking courses in Geology will decrease in the near future. The members of the department usually spend their summers in field work, but the laboratory study of the material collected has to be carried on during the winter months.



All members of the department are busy with their research programs. Dr. Warren is continuing his studies of Devonian and Cretaceous rocks of Alberta and the Mackenzie valley, and several papers have already been published on this study. He is also continuing his studies on the glacial geology of Alberta and parts of this study have been published also. Dr. R. L. Rutherford has continued his studies of the lithology and structure of the strata of the plains and foothills of Alberta. Parts of this study have been published and other contributions are expected in the near future. At present, he is Chairman of the Sub-Committee on Non-Metallic Deposits, Industrial Minerals, Coal and Oil, of the National Advisory Committee on Research in the Geological Sciences. Dr. R. E. Folinsbee is continuing his studies of the Pre-Cambrian rocks and ore deposits of a large area north and east of Great Slave Lake in the barren lands. Parts of this work have already been published. Mr. C. R. Stelck is continuing his study of the macro- and micro-faunas of the Cretaceous rocks of the Peace River area.

*History*—Professor Long has written a biographical sketch on the career of the late C. A. Magrath which will appear in due course in the Proceedings of the Royal Society of Canada. Professor Long, Dr. Collins and Mr. Thomas have been working on manuscripts which they hope will ultimately appear in book form. Dr. Collins is working on the period of the Renaissance and Reformation, Mr. Thomas on the Liberal Party in Alberta and Professor Long on the Birth of British North America, 1713-1791.

*Mathematics*—Dr. Campbell reports that, from the point of view of his department, the outstanding event of the year was the meetings of the Canadian Mathematical Congress and Seminar held in Vancouver during August and September and covering the period of three weeks. Contributions were made by several men of international reputation. Certain members of the Department of Mathematics attended these sessions and found the experience extremely valuable.

Professor Keeping has been engaged throughout the year in collaboration with Professor Kenney of Wisconsin in the revision of his textbook in Statistics. Professor Phibbs spent three months during the summer at the Dominion Astrophysical Observatory at Victoria as a research assistant, on the invitation of the Director, Dr. J. A. Pearce. Mr. J. C. Jacka spent the summer at the University of Chicago and in August was awarded the M.Sc. degree in Mathematics.

*Modern Languages*—Dr. Owen reports some reduction in the size of first year classes. Apart from this, the registration, including graduate students' registrations, has been well maintained. He also reports that the use of records and the Linguaphone has proved very valuable in the work of the language teaching. The organization of separate sections for Arts students (B.A.) has made it possible to a greater extent than heretofore to use French and German as the language of instruction in the Junior courses.

Dr. Healy, Dr. Greene and Mr. Faucher collaborated on a joint research project. Dr. Mueller has been preparing selections for use by science students in German 40. Dr. Owen has been able to renew his studies in the History of Germanic Culture which had to be postponed at the outbreak of war.



*Philosophy and Psychology*—On the side of Philosophy the classes have continued large and have been ably handled by Mr. Mardiros. There are no changes to be reported on this side of the department's work.

On the Psychology side, the work has proved unduly heavy for the two instructors who have charge, and arrangements are being made to secure assistance next session.

The department as a whole has been carrying a heavy load of graduate students, particularly extramural students in Philosophy. The handling of these extramural students, together with the supervision of those in attendance, has made heavy demands on the instructors in this department.

Dr. Smith is continuing his research in Philosophy under a Defence Research Board grant.

*Physics*—Professor Grayson-Smith reports progress of research work which is being carried on by members of this department. Dr. R. J. Lang is continuing his work with the vacuum grating spectograph. Dr. K. B. Newbound is also carrying on research work in spectroscopy. Dr. E. H. Gowan is continuing his work on various aspects of the problem of solar radiation. Dr. D. B. Scott, in nuclear physics, is using a cloud chamber to study the beta-ray spectrum of sources having energies lower than those usually recorded by a beta-ray spectrometer. Dr. W. W. Happ and Mr. L. H. Greenberg have just completed a working model of a counting-rate meter which gives direct readings of both the average number of particules per second in a Geiger counter, and also the statistical fluctuation about the average. Dr. Scott and a physics student have been collaborating with Dr. C. F. Bentley of the Soils Department in a study of the uptake of sulphur from fertilizers, using radioactive tracers. Dr. Grayson-Smith started in a modest way with one student to inaugurate work in Physics of the solid state.

*Political Economy*—Research in agricultural economics has continued in co-operation with the Economics Division, Dominion Department of Agriculture. The Department is participating in studies sponsored by the Prairie Farm Rehabilitation Service in connection with irrigation development. The Dairy Farm Cost Study continues under the Department's supervision. Funds provided by the Rockefeller Foundation have been used for further investigation of problems of municipal government and finance.

*Zoology*—Dr. R. B. Miller reports that there were ten graduate students associated with the department this year.

With reference to staff research, Dr. W. Rowan continues to carry on his animal cycle questionnaire and a research program on the cyclical abundance of rabbits. Dr. Miller, in co-operation with the Provincial Fishery Branch, is carrying on with the surveys of the Alberta waters. The studies of the management of commercial fisheries also continues. Dr. Miller is still chairman of a Canadian committee with the duties of co-ordinating the research on whitefish infestation across Canada. A graduate in the department is working on a grant from this committee. Mr. J. E. Moore has completed his thesis for the graduate school of the University of Toronto and goes east this spring to present it for his Ph.D. He is also making collections of amphibians, reptiles and small mammals in preparation for a study of these forms in Alberta. He is working with Dr. Rowan on the animal cycle questionnaire.

Dr. Clare is gathering apparatus and material to carry on with his work on the quantities of certain elements in the bodies of small animals.

Dr. Miller further reports that in May a Biological Station will be set up on the Sheep River drainage. This is a co-operative venture with the University and the Department of Lands and Forests. Dr. Rowan and Dr. Miller were lecturers at the special school in Banff for forestry officers and wardens of the Province and the National Parks. Dr. Rowan was guest speaker at the annual meeting of the Alberta Fish and Game Association in Calgary, February 3rd. He was also invited to speak at Yale University in February, but was unable to arrange to get away for the required time. Dr. Miller was asked to attend the meeting of the Canadian Committee on Freshwater Fisheries Research which met in Ottawa on January 2nd. He presented, by invitation, a paper entitled "Critique on the Need and Use of Poisons in Fisheries Research".

### **Report of Dean Andrew Stewart, Director of the School of Commerce**

The plans of the School of Commerce to strengthen instruction in Business Administration and to introduce the fourth year of the Honours Business Administration program could not be implemented, as it proved impossible to fill appointments in Accounting and Business Administration. The work of the School continued with the valuable assistance of part-time instructors, and with some restriction of courses offered.

The graduating class of seventy-one included forty-three rehabilitation students. This is the last substantial group of veterans to graduate in Commerce. It is a pleasure to record the diligence and application of the rehabilitation students. The School expects that they will play a valuable part in the business life of the Province.

The first and second year classes, numbering thirty-six and forty respectively, reflect the trend toward more normal registrations. The decline in numbers has relieved some of the instructional difficulties arising out of large classes.

Employment opportunities again proved ample in the fields of public accountancy, government and general business. Improved demand for graduates in general business has been noticeable, and appears, in part, to reflect the success of earlier graduates already established in business positions.

Close relation has been maintained with the organizations of both the Chartered Accountants and the Registered Industrial Accountants.

In association with the Chartered Accountants, the School has undertaken work in connection with standardization of terminology, and services covering examinations have been carried out in co-operation with the Dominion Association.

An enlarged program of evening lecture courses was provided for the Alberta Society of Registered Cost Accountants. The program was extended from two to four courses, and included instruction in Calgary and Edmonton. In addition to the lecture courses, the School has assisted the Alberta Society by periodic review of examinations questions through the Students' section of the Dominion magazine "Cost and Management" and by review of research projects on terminology.

## **Report of Professor Mabel Patrick, Director of the School of Household Economics**

Miss Grace Duggan has been on leave of absence, studying home economics training in Canada and the extent to which this meets the needs of the profession on a Canadian Home Economics Association fellowship. Miss Duggan is registered in the Graduate School at the University of Toronto.

Eleven other graduates of the School have been continuing their studies at various Universities in the United States, many on fellowships. Of these four have received Master's degrees this year.

Fifteen members of the Senior class and one graduate have accepted student training positions fourteen in hospitals and two in other institutions two have accepted positions as district home economists. Of the remaining five, three will be in homes of their own and two are undecided.

## **Report of Professor E. H. Strickland, Acting Dean of the Faculty of Agriculture**

The activities of the Faculty of Agriculture in the University of Alberta may be separated into two main divisions, (1) academic and (2) experimental. For convenience in presenting this report the work of the Faculty will be sub-divided under these headings.

It seems proper, however, as a preliminary to mention that, in addition to teaching and participating in research work, members of the staff of the Faculty of Agriculture devote a considerable amount of time to extension and administrative work during the year. It is felt that maintaining close contact with the farm people of Alberta is of great importance to the Faculty and to the University as a whole. On the one hand staff members are kept closely in touch with the problems arising on the land and on the other hand the results of research are made available to farmers with the least possible delay. Direct communication with farmers has been made possible through addresses at farm meetings, agricultural short courses and field days, and by means of correspondence and personal interviews. A number of bulletins and circulars were issued during the year and radio talks were given on the Alberta Farm and Home Forum programme (CKUA). The Dean of the Faculty of Agriculture serves as chairman of a committee made up of representatives of the Faculty of Agriculture and the Alberta Department of Agriculture which directs the Alberta Farm and Home Forum programme. Close co-operation has been maintained with the Department of Extension of the University and the Extension Service of the Alberta Department of Agriculture.

A number of staff members served during the year on national committees functioning under the authority of the National Advisory Committee on Agricultural Services and the National Research Council and on various agricultural committees operating in the provincial sphere.

### *Academic*

One hundred and twenty-six students were registered in the final year of a course qualifying them for the degree of B.Sc. in Agriculture. This constitutes the largest graduating class in the history of the Faculty and it consists chiefly of veteran students.

Twenty-nine students engaged in agricultural research were registered in the School of Graduate Studies. Of this number it is gratifying to report that seven are graduates of other universities who have selected this university in order to obtain more advanced training.

A six-month Diploma Course in Dairying was again offered during the year under a joint arrangement between the Department of Dairying and the Dairy Branch of the Alberta Department of Agriculture, with assistance from Canadian Vocational Training.

In co-operation with the Department of Extension, lectures and demonstrations were given at the Farm Young People's Week and in a short course given for Sanitary Inspectors of the Alberta Department of Public Health. In addition, members of this Faculty took part in an Agricultural Short Course and Conference for Field and Office Staff of the Veterans' Land Act and in a Conference of Agriculture Teachers.

The passing of Professor J. Macgregor Smith during the year is recorded with deep regret. Professor Smith joined the staff of the University of Alberta as Professor of Agricultural Engineering, January 1, 1921. He rapidly assumed a prominent position both at the University and in the field of agricultural development throughout the province. In 1949 his services in this connection were recognized by his election as Fellow of the Agricultural Institute of Canada. Four bulletins of which he was the author have met with a wide demand, both in Canada and in several foreign countries. In addition to his departmental duties, Professor Smith served for many years on various committees concerned with University administration.

During the year Dr. J. R. Fryer retired from the position of Professor of Genetics and Plant Breeding after a long period of excellent service to the University. As an able instructor, he conducted courses in genetics for students in three faculties. In the field of research, to which he devoted himself wholeheartedly, he made lasting contributions towards the improvement of fodder and other crops with particular emphasis upon their adaptability to Alberta conditions. He is succeeded by Dr. L. P. V. Johnson.

Academically, the standings obtained by students in this Faculty were very gratifying. Veteran students in particular have consistently maintained their earlier record of efficiency.

The Student-Faculty Relations Committee, now in its third year, has functioned to the mutual advantage of both groups concerned.

The executive of the Agricultural Club this year decided to replace the Annual Field Day with a Visitors' Day to which Members of the Legislative Assembly and representatives of industry were invited to attend during the morning, while students in the Schools of Agriculture as well as high school students to as far south as Red Deer were invited for the afternoon. The enthusiastic response to this invitation by some 1,500 visitors was so marked that it probably will be repeated annually.

### *Experimental*

The usual programme of research work in the various departments was maintained during the year. Several grants from the National Research Council and from commercial organizations greatly assisted the development of certain projects.



In the Department of Agricultural Engineering close contact was maintained with the farm machinery industry, with particular attention being paid to methods for harvesting small seeded crops and to new equipment in tillage and seeding. Investigations into sugar beet harvesting machinery were continued. Farm equipment companies continued their support of the Department in the matter of loaning machines for laboratory use during the term.

Research conducted by the Department of Animal Science has been mostly in the field of nutrition. Experiments in pig feeding have been completed in order to ascertain the comparative merits of hand and self-feeding; others in progress are designed to yield information on the effect of protein factor concentrates and of high fibre rations. Variations in the vitamin contents of the blood and milk of swine are being investigated.

Pregnancy rations for ewes are being studied, while feeding experiments with cattle are concerned chiefly with the minimum amount of grain which is required for finishing and the possible utilization of legume straw in this connection.

For cattle and poultry, assay work on the essential amino acid contents of grain is yielding direct practical information.

The completion of an incubation-battery building has greatly improved facilities for poultry research. The value of the addition of certain vitamins to the starter rations of turkeys has been demonstrated and commercial feed manufacturers are already applying this information to their products.

Investigations in the Department of Animal Science were greatly assisted by grants and donations from Burns & Co. Ltd., Hoffman-La Roche Ltd., Lederle Laboratories, Merck and Co. Ltd., and the United Grain Growers Limited.

The twenty-eighth annual Feeders' Day was held early in June. This event continues to appeal to farmers throughout the Province and results in a strong demand for the Press Bulletin containing the reports presented on that occasion.

Studies of the low-temperature bacteria in Edmonton milks and creams by the Department of Dairying, together with investigations of HTST milk pasteurization will, undoubtedly, lead to improved public health regulations and practices.

In the Department of Entomology investigations have been made into the nature of the effects of BHC on germinating grain when this material is employed for wireworm control. Tests upon the nutritional requirements of Pale Western Cutworms are yielding important results. In connection with observations now being made in the Arctic, Professor Hocking has developed a wind-tunnel technique for use in the study of insect flight range.

In the Department of Plant Science the direction and scope of research follows much the same patterns as those of former years with two important additions. The first of these is a cytogenetical study, by Dr. Unrau, of wheat involving the use of monosomes and nulismes, while the second consists of extended studies, under the direction of Dr. Corns, of the effects of 2,4-D and other hormones on legumes. Continued work with cereals, and particularly with oil-seed plants, progressed favorably despite a very poor growing season. Ergot studies are providing results of practical value, as are those of other diseases of barley.

Several thousand seedlings are being set out in connection with an extensive fruit-breeding project on which a good start has been made despite very unfavour-

able weather conditions. For the first time the University-developed sweet corn, Altagold, is being offered by a commercial firm. Important progress is being made in testing the suitability of various shrubs, trees, and ornamentals for Alberta conditions.

The biochemical laboratory continued to give service to other departmental divisions and to carry on its own research into fundamental properties of plant proteins. The new Field Laboratory at Parkland Farm should be ready for use early this summer and will serve as a very important addition to the research facilities of this Department.

Research in the Department of Plant Science was aided by generous grants from the National Research Council and the following commercial organizations: Barley Improvement Institute, Purity Flour Mills Limited, Maple Leaf Milling Co. Ltd., Robin Hood Flour Mills Ltd., Ogilvie Flour Mills Co. Ltd., Ellison Milling and Elevator Co. Ltd., Line Elevators Farm Service, North American Cyanamid Ltd., United Grain Growers Limited, and the Alberta Seed Growers' Association.

Visitors' Day was held on August 6th. There was a good crowd and intense interest was shown in the work of the Department.

In the Department of Soils, long-time fertilizer and crop rotation experiments have again demonstrated the importance of phosphates on many black soils and the remarkable value of sulphates on legumes on deeply leached gray wooded soils.

Experiments, in which radioactive sulphur was employed, were conducted by Dr. C. F. Bentley in co-operation with the Department of Physics. Interesting results were obtained regarding the uptake of sulphur by both legume and grain crops.

Water erosion studies were initiated by Dr. J. A. Toogood at St. Albert. These, apparently, are the first studies of this kind to be conducted in Western Canada.

Soil microbiology research, under the direction of Dr. J. D. Newton, was continued and was centred chiefly upon nitrogen fixation by legumes.

It is with great regret that I have to report that, owing to ill health, Dean Sinclair was unable to prepare this report. It is hoped that he will be able to return to his duties early in the summer.

### **Report of Dean W. Scott Hamilton of the Faculty of Dentistry**

Dr. S. D. Fraser returned to the Faculty in September after having spent a year in post-graduate study at the University of California. Mr. Robert Stacey Van Alstine, a member of the graduating class, has been accepted as a graduate student in Oral Surgery at the University of Michigan on a Kellogg Foundation Fellowship. Mr. Gordon Cummings Swann, also of the graduating class, has been accepted as a graduate student in Orthodontics at the University of Toronto. Dr. Kenneth Allan McMurchy of our faculty has been accepted as a graduate student in Anatomy and Restorative Dentistry at Columbia University on a Kellogg Foundation Fellowship. During the past year Dr. H. R. MacLean was made a Fellow of the American College of Dentists at their convocation in San Francisco.

Members of the Faculty have attended numerous conventions and served the profession and the public in various ways. Dr. H. R. MacLean is a member of the sub-committee of the National Research Council. He also represented the faculty at the annual meeting of the American Association of Dental Schools, where



he presented a paper on "Means of Preparing Students in Transition Periods of Dental Education". The Dean of the Faculty has continued as chairman of the Council on Dental Education of the Canadian Dental Association. This has necessitated the preparation of many reports and presentations.

A special student was Dr. Anna Gipters, a displaced person from Latvia. Other displaced European dentists, about five in number, are in process of preparing for entry into our school for Canadian qualification.

All but four of the graduating class of 50 are ex-servicemen. They served in the various branches and in nearly all theatres of war. They were well represented in the Air Force, where some served with distinction by accounting for a number of enemy aircraft destroyed. Three hold decorations: D.F.C., D.F.C. with Bar, Croix de Guerre with Silver Leaf.

This year has been the most active to date in our Clinic. In spite of the large senior class there were usually sufficient patients to keep the students busy. It is, however, questionable if this would be the case year after year, with 50 in a class. I believe our quota of a maximum of 35 admissions is a sound policy.

Miss Knoll in our Caries Control Laboratory has had more work than she could comfortably handle, and arrangements have been made for a second appointment in this laboratory. The extension of this service to the public is of course responsible for the increased demands. From the financial receipts to date it is evident that the increase in staff will not be a burden to the University.

The receipts in the Clinic have improved very materially since the appointment of Mr. Ian MacLean as chief clerk. There is also greater economy in the ordering and dispensing of supplies.

The support of the President and Board of Governors during the past year is hereby recognized and appreciated.

### **Report of Dean M. E. LaZerte of the Faculty of Education**

Seven of the thirty members of the staff of the Faculty of Education have completed requirements for either the Ph.D. or the Ed.D., nine were registered in doctorate programs in the United States last summer and four additional members will begin post-graduate programs this summer.

The duties of the staff continue to be both heavy and varied. In addition to their regular teaching duties, staff members supervise the practice teaching of nearly five hundred students, supervise the graduate study and theses of a large group of graduate students and give freely of their time to extension services with teachers' organizations and Home and School Associations.

The enrolment in the Faculty of Education continues to increase slowly. It is anticipated that registrations will increase about fifty in number next session. The two-year program which will in future lead to a Standard Certificate is increasing in popularity. Present indications are that the one-year program may be discontinued in two or three years.

### **Report of Dr. A. L. Doucette, Director of the Calgary Branch**

The general operation of the Calgary Branch has progressed smoothly with full and generous co-operation of all staff members among Faculty of Education and Faculty of Arts personnel.

A live and aggressive Calgary University Committee composed of representatives from several organizations and institutions in the city are pressing for expansion of University facilities in Calgary. Their desire is for the introduction of two years of Arts. It has been suggested by the University Administration that first year Arts might be a possibility, but that the introduction of the second year would involve too many diversified fields and would not be feasible. However, a compromise might be suggested by extending the B.Ed. program to three years and introducing a first year of Arts. Classroom space is by no means overtaxed at the present time and additional offerings in Arts could be handled in existing classroom space.

This year we introduced a program of rural practice teaching. The venture was highly successful and served to introduce the teachers-in-training to the kind of work they will face when they take over teaching positions in the field.

Close liaison was maintained between the Calgary Students' Council and the Edmonton Students' Council, between the Calgary Education Undergraduate Society and the equivalent Edmonton organization, between the Calgary Faculty Council and the Edmonton Faculty Council, and between the Committees on Student Affairs in Edmonton and Calgary. This inter-relationship has served to develop a university spirit and an *esprit de corps* which is very essential in our branch of the campus two hundred miles removed.

We have a lively functioning organization of student activities: Students' Council, Education Undergraduate Society, University Athletic Board, Committee on Student Affairs, Drama Club, Choral Club, Art Club, Athletic Club, Badminton Club, University Forum and so on.

We always appreciate visits from important personages like the President, Deans, Registrar, Deputy Minister, and such like. They bring prestige to our local organization. We appreciated the President's visit at our closing exercises. This latter function takes the place of commencement or convocation and is a tradition that has come to stay.

Our staff consists of nine Faculty of Education instructors, four Arts and Science instructors, a librarian, an assistant librarian, three sub-staff members in the general office, and in addition we make use of seven instructors in the Institute of Technology and Art.

During the year a committee of the staff engaged in research on follow-up data pertaining to evaluation by graduate students of the courses in the one-year and two-year teacher-training program.

The Calgary staff are laying plans to deal with the newly revised B.Ed. program which becomes operative in the fall of 1950. Mr. Finn, Supervisor of Practice Teaching, is laying plans for the extension of practice teaching for Bachelor of Education students.

The wave of Veteran students has left us. We regret their passing because of their seriousness of purpose, their maturity, and their staunch contribution in student affairs. They have left a fine record behind them.

It is requested that at all times the various branches of the University administration keep in mind the Calgary Branch and recognize that although at some

distance geographically from Edmonton, it is nevertheless an integral part of the University. The Director of the Calgary Branch appreciates the help and direction received from the administration in Edmonton.

### **Report of Dean R. M. Hardy of the Faculty of Engineering**

The total registration of 769 in the Faculty reflects the passing, during the previous session, of the crest of the post-war wave of student veterans. The total registration in the Faculty is reduced 17 per cent as compared to the session 1948-49 and 20 per cent from the peak registration during the session 1947-48. However, it is still about three times the average registration in the immediate pre-war years.

Of particular significance is the fact that the registration in the first year is 163. Only 7 per cent of this total consists of student veterans. The class therefore may be regarded as more or less typical of the intake to be expected into engineering for the next few years. On the basis of the first year class of 150 the total registration in the Faculty of Engineering will be about 500. This figure is about double the total registration in the immediate pre-war days.

Employment opportunities for engineering graduates are complicated this year due to the fact that the largest class in our history is being graduated this year. While there are many opportunities available for engineering graduates, the supply of graduates in Canada this year may exceed the demand. Some may find it necessary to take positions of a nature that have not as great an interest to them as they would like. It may also be necessary for some to accept positions in non-engineering fields. In general, however, there is no indication that the engineering fields are excessively overcrowded. This year's surplus spread over a period of the next two or three years will not represent a large excess. The employment situation for undergraduate students continues to be good. Of significance is the fact that a very large percentage of both graduates and undergraduates will secure employment in industries in the Province of Alberta and its immediate environs.

The demand for post-graduate instruction has continued in all of the engineering departments, it being particularly high in the Departments of Civil and Electrical Engineering.

A project, as part of an M.Sc. program concerned with the recovery of gold from arsenious ores by cyanidation, has been under way in the Department of Mining Engineering. Work is also continuing on research in connection with bituminous sands in co-operation with the Research Council of Alberta.

In the Department of Electrical Engineering contributions have been made to a research project concerned with the cost of generation of electrical power in Alberta in co-operation with the Alberta Research Council and the Department of Political Economy. Four research projects have also been carried on as part of the requirements for M.Sc. degrees. These were concerned with a Frequency Measuring Device, Electrical Methods for Purifying Saline Waters, the Development of Scintillation Counters for Detecting Alpha and Gamma Radiation and an Investigation into the Effect of Slots in 3 cm. Rectangular Wave Guides of the Radar Pattern.

In the Department of Chemical Engineering, despite the heavy tasks incidental to the equipping of new laboratories and the organization of new curricula in

petroleum engineering, a considerable amount of research work was carried on. Programs on the Flow of Non-Newtonian Fluids and the Flow of Two Phase Air-Water System in Vertical Pipes were continued. The first named project has been sponsored by the National Research Council. Other projects which are under way included the Catalytic Oxidation of Asphalt (by a Shell Oil Fellow), the Mechanism of the Air Drying of Porous Insoluble Solids (by a Cominco Fellow) and the Construction of an Electrical Model of a Petroleum Reservoir (by an Imperial Oil Fellow).

In the Department of Civil Engineering research work was continued on the investigation of the durability of concrete with particular reference to improving the quality of concrete pavements and manufactured concrete products. This work has been financed by contributions from the City of Edmonton, the Alberta Transit Mix Concrete Company, Jeffries & Sons, the Canada Cement Company and Master Builders Company of Canada. Other projects conducted by M.Sc. candidates were concerned with electrosmosis problems. The project concerned with the failure of pavements at trolley bus stops was continued. This project was financed by the National Research Council. Work was also continued on a project financed by the Prairie Rural Housing Committee and having to do with rural sanitary facilities. Two bulletins on this work are now ready for printing. A Highway research project was also supervised from the Department and the facilities of the soil mechanics laboratory were made available for the laboratory work. This project was conducted on highway construction jobs in the three Prairie Provinces and was financed by contributions from the National and Alberta Research Councils, the Canadian Construction Association and the Prairie Roadbuilders Section of the C.C.A. Valuable co-operation was also received from the officials of the highway departments in each of the Provincial Governments of the Prairie Provinces.

The Department of Chemical Engineering, in co-operation with the Petroleum industry and the Extension Department of the University, conducted two very successful "Mud Schools" during the session 1948-49. Further schools in this same field will be offered this session and it is planned to expand the extension work of the Department by the addition of an "Oil Treating School" and a "Gas Measurement School". A supervisory training program is also being instituted as a co-operative activity between the industry, the Provincial Government, the Extension Department and the Chemical Engineering Department.

In co-operation with the British American, Huskey and Imperial Oil Companies, a five day course dealing with "Asphalt Pavements" was conducted at the Banff School of Fine Arts jointly by the Department of Extension and the Civil Engineering Department. The course was very favourably received and students were in attendance from many parts of Canada. Registrations were received from a geographical area extending from Moncton to Vancouver, with a total of 90 in attendance.

Specialized technical service to industry was continued principally through the Civil Engineering Department in the fields of concrete and soil testing.

The relationships between industry and the engineering departments have continued good. In fact, they have probably been on a more sound and generally satisfactory basis than at any time in the history of the Faculty.

The first graduating class in Petroleum Engineering will be graduated this session. It will include sixteen students. While some adjustments are being considered in the program adopted for petroleum engineering, in general it has stood the test of its first trial quite satisfactorily.

The first graduate in Irrigation Engineering will also be graduated this year. This course has not been as attractive to students as was anticipated. Despite the fact that there will, within the next two years, be extensive opportunities in this province for technical graduates in this field, the students who have exhibited an interest in the course have finally selected a standard Civil Engineering curriculum rather than the more specialized curriculum in irrigation engineering.

## **Report of Dean W. F. Bowker of the Faculty of Law**

### *Registration*

The two noteworthy facts are:

- (a) The enrolment is 140. This is the largest in the history of the Faculty and more than double the highest enrolment in any pre-war year.
- (b) The number in the graduating class is 36. This is half again as large a number as ever was graduated in any year in the past.

Veterans are still in the majority. In the past three years, approximately fifty students have entered the faculty annually. It now appears that the number will remain at this figure for the next two years. Our reading rooms will continue to be crowded until the new library is completed.

### *Employment of Graduates*

Every member of the graduating class has been able to find an office in which to serve his year under articles. The growth of the province has meant more openings in general practice, government and business. At present there is a shortage of young lawyers, especially in smaller centres. It will probably be several years before the supply equals the demand.

The Faculty operates an unofficial placement service which has been successful in bringing together the prospective employer and the graduate.

### *Staff*

For the first year in the history of the Faculty there are four full-time members on the staff. This means greater efficiency both in teaching and administration.

### *Curriculum*

The Faculty has continued to study the question of revision of the curriculum. It will be another year or more before a firm decision is reached.

### *Library*

The number of books has been increased in proportion to the enrolment and a great many texts have been added. The library is much better than it ever has been in the past.

### *Graduate Study*

One student, John Parry, is studying at Oxford University under a Beaver Club Scholarship. Another, Crawford Ferguson, will commence studies at Oxford as a



Rhodes Scholar in the fall. None is studying in Canada or the United States at present.

### *Research*

The members of the staff have not published any articles during the current year, though one major article is to be published soon. By another year or so it is expected that more contributions will be made than in the past.

### *Law Society of Alberta*

The relations between the Faculty and the Law Society continue to be of the best. Since the war the Law Society has established the custom of inviting the Dean of the Law School to make a report to the annual meeting of the Law Society. This has helped to bring the two bodies into closer contact.

### *Conclusion*

It is felt that the larger classes of the post-war years have been of high calibre. They have worked hard, co-operated with the staff and morale has continued high.

## **Report of Dean J. W. Scott of the Faculty of Medicine**

An active program of undergraduate and graduate teaching has been carried on in all departments of the Faculty. The acute shortage of available instructors which we experienced during and immediately after the war is gradually correcting itself. During the present session Dr. R. M. Shaw retired as Professor of Bacteriology after a long and faithful period of teaching. He has been succeeded by Dr. R. D. Stuart. Dr. H. B. Collier has succeeded Dr. George Hunter as Professor of Biochemistry. The members of the Faculty are pleased that the Board of Governors has arranged for the setting up of a Department of Preventive Medicine. It is planned that an appointment to the Chair in this important field will be made shortly. In the Department of Pathology, Dr. Douglas Waugh has been appointed Associate Professor.

The Faculty of Medicine sustained a grievous loss during the session in the death of Dr. W. F. Gillespie, Professor of Surgery. Dr. H. H. Hepburn has been appointed to succeed Dr. Gillespie.

Six students were admitted to the third year from the University of Saskatchewan. The veteran students who were given priority by our Admissions Committee have now been largely taken care of. We still, however, have a brisk demand for places in the first year. With increased clinical teaching facilities, consideration is being given to increasing the number admitted, and it is anticipated that this Faculty will soon be able to keep pace with the demands for training in Medicine. In addition to the 199 undergraduate students in Medicine, there are 22 students in the course in graduate training. These students carry out a five-year course of training leading to Certification or Fellowship examination in the specialty.

Other phases of graduate training are the clinical and pathological conferences given on Saturday mornings at the University Hospital, and the annual Refresher Course presented each day. This course was attended last year by 238 doctors.

A vigorous attempt is being made to establish clinical research. Two endowed research beds have been made available in the University Hospital through the generosity of the Kinsmen Club and the Alberta Cancer Society.



The Medical Research Fund made available by the Board of Governors, the National Research Council and the Cancer Institute of Canada have contributed to the research program carried on in the Faculty.

### **Report of Professor Helen E. Penhale, Director of the School of Nursing**

Nursing is not only in transition from a wartime to a peace-time basis, it is also in transition from a quasi-professional to a professional status. The emerging pattern of health care as a social science in the service of society offers new hope for human welfare. This new pattern of health care demands new curricula for all the health professions. We in nursing, therefore, must be willing to make a new curriculum design for nursing.

During the past year the staff has had continuously before it one question—"What do we propose to do about nursing education at the School of Nursing, University of Alberta?"

It has long been felt by students registered in the first year of the degree program that they did not "belong" to nursing. The guidance program started in 1948-49 was enlarged to include the first year degree students. The program started with "Orientation Week". Its aim was to foster better adjustment of the student with maximum growth—personally and socially. Throughout the year emphasis was placed on the early professional adjustment of the students. While it is yet too early to evaluate this program, the first year students appear to have gained much from the personal contacts afforded through this program.

The W. K. Kellogg Foundation Fellowship program for Canadian University Schools of Nursing was again offered to the School. Two of our graduates are pursuing further study—one at Wayne University, Detroit, the other at Columbia University, New York. Their return to the School in the coming year will improve the educational program in clinical supervision through the integration of public health in the basic curriculum.

A substantial grant was made available to each of the eleven schools of nursing in the province. The money was used for reference books, micro-films, a film strip projector and a moving picture projector. Audio-visual instruction has been found to be of great value in the teaching of appreciation courses.

The revisions of the affiliation program, started two years ago, was completed when a new contract between the School of Nursing, Provincial Hospital, Ponoka, and the School was drawn up.

Assistance has been made available to the ten schools of nursing throughout the province. Arrangements were completed for a Psychiatric Nursing affiliation at the Provincial Hospital, Ponoka. Two schools of nursing—Medicine Hat Hospital and Lamont Public General Hospital—are each sending two students every eight weeks for the affiliation. The Tuberculosis Nursing affiliation at the Central Alberta Sanatorium, Calgary, continues to provide a very necessary experience for students in the schools of Nursing at Holy Cross Hospital, Calgary, and Galt Hospital, Lethbridge.

The demand for well prepared nurses continues. In order to help meet this need, larger classes were admitted during the year. There are two hundred and forty-five students registered in the School. This total is made up of one hundred and nine students in the five year program leading to the degree of Bachelor of Science in Nursing; one hundred and three students registered in the three year course leading to the Diploma in Nursing; twelve students from the School of

Nursing, Provincial Hospital, Ponoka, affiliating in general nursing; two students from the School of Nursing, Royal Alexandra Hospital, Edmonton, affiliating in Orthopedic Nursing; nine graduate nurses in the one-year course leading to the Diploma in Teaching and Supervision in School of Nursing and ten graduate nurses in the one year course leading to the Diploma in Public Health Nursing. The ratio between degrees and diploma students has remained almost constant over the past three years.

The members of the staff of the School of Nursing continue to take an active part in Nursing activities throughout the province. Home Nursing was again offered to Farm Young People.

Assistance was offered graduate nurses through a six-weeks course in Administration in Small Hospitals and a two-days refresher course on "Problems of Adjustment in the Aging Population". Twenty-eight nurses received certificates of attendance at the course in Administration while over one hundred nurses attended the two day refresher course.

In evaluating and appraising the work of the past year, progress has been made. Major changes in the degree program curriculum are anticipated in the coming year.

### **Report of Dr. M. J. Huston, Director of the School of Pharmacy**

#### *Academic*

An important milestone in the development of pharmacy on the campus was reached this year when the School of Pharmacy was granted autonomy of internal administration.

Formal opening ceremonies for the fine new laboratories of the third floor of the Medical Building were held on September 23, 1949. These laboratories provide excellent facilities for teaching and research. Many visitors, both at the time of the formal opening and since, have been shown through the department and have made many favorable comments.

The number of full-time teaching staff members in the School of Pharmacy was increased to four with the appointment of Mr. A. J. Anderson as Lecturer in Pharmacy.

The elimination of the two year diploma course has made possible certain desirable changes in the curriculum. The course in English and the Division A or Division B option have been moved to the junior years to make possible an emphasis on professional and scientific subjects in the senior years.

The total enrollment of 118 is a decrease from the 127 last year. Enrollment will undoubtedly remain high as there are many openings for pharmacists in the province. There are many more requests for graduates this year than can be met by the members graduating.

#### *Research*

This year saw the culmination of several years research in this and other Canadian schools of pharmacy with the publication of the revised Canadian Formulary. Alberta was assigned the research work on the external preparations and made a significant contribution to the revision. This work is continuing.

Three M.Sc. students carried on investigative work in the department. Their work was assisted by grants totalling \$1,750 from the Canadian Foundation for the Advancement of Pharmacy.

Projects being investigated include the following: the action of a number of hypnotics, anti-convulsants, antihistaminics and cardia glycosides on the somatic neuromuscular mechanism; the adaptation of the centrifuge to the determination of emulsion stability and to the determination of the efficiency of suspending agents; the assay of sulphonamides by means of the titrimeter; assay procedures for para-aminosalicylic acid; the effect of denervation on the fatigue curves of striated muscle; the stability of procaine solutions under autoclaving.

#### *Extension*

The School of Pharmacy again organized a two-day Refresher Course in conjunction with the annual meeting of the Alberta Pharmaceutical Association.

Four extension bulletins covering recent advances in pharmacy were compiled for distribution to the pharmacists of the province. In addition, many professional problems have been referred by pharmacists to the department.

Staff members continue to take an active part in the affairs of the Canadian Conference of Pharmaceutical Faculties. M. J. Huston is immediate past-president of that organization and B. E. Riedel has served during the year as editor of the Conference section of the Canadian Pharmaceutical Journal.

During the year a number of papers were presented by staff members to scientific and social organizations.

### **Report of Dean John Macdonald, Chairman of the School of Graduate Studies**

#### *Registration*

During the academic year 1949-50, 272 students were registered in the School of Graduate Studies. The distribution of students, according to degrees sought, has been as follows:

	Men	Women	Total
Master of Arts .....	50	12	62
Master of Science .....	42	2	44
Master of Science (Ag.) .....	30	2	32
Master of Science (Eng.) .....	25	.....	25
Master of Education .....	58	9	67
	<hr/> 205	<hr/> 25	<hr/> 230

In addition, 42 graduates (37 men and 5 women) were registered as special graduate students.

There is an overall increase of 45 students this year over the number registered in 1948-49.

The distribution of candidates according to departments has been as follows:

Anatomy .....	1	Mathematics .....	1
Animal Science .....	3	Mining Engineering .....	1
Biochemistry .....	8	Modern Languages .....	5
Botany .....	1	Pharmacy .....	3
Chemical Engineering .....	6	Philosophy and Psychology .....	22
Chemistry .....	7	Physics .....	8
Civil Engineering .....	10	Plant Science .....	15
Dairying .....	3	Political Economy .....	9
Education .....	67	Soils .....	4
Electrical Engineering .....	8	Zoology .....	5
English .....	9	Physiology .....	2
Entomology .....	7	Special Grads .....	42
Geology .....	8		
History .....	17	Total .....	<hr/> 272

### *Progress During Session*

The outstanding point of interest is that there is a great increase in the number of students obtaining their master's degrees this year. There are 58 potential graduates in the School as compared with 37 who received their degrees in 1949.

A change has been arranged in the application dates for certain scholarships which come under the jurisdiction of the School of Graduate Studies. This is to ensure that all scholarship candidates have their applications considered at the same time and not, as present, when some are considered in May and others postponed until June.

### *Recommendations for Degrees*

The number of students recommended for master's degrees are as follows:

M.A. ....	14	M.Sc. (Eng.) ....	6
M.Sc. ....	19	M.Ed. ....	7
M.Sc. (Ag.) ....	7		

### **Report of the Librarian, Miss Marjorie Sherlock**

Library activity continued on much the same level as in 1948-49, with a total circulation of 186,180. Evening attendance numbered 14,700. No record was kept of the daytime use of the various reading rooms, but they were filled to capacity during most hours of the day.

### *Staff*

The staff of the Library consisted of 23 full-time assistants (of whom 12 were professional) and 6 half-time assistants, including a delivery boy.

*Student Assistants*—Twenty-six student assistants were employed for varying periods weekly, assisting at the desk, shelving books and doing routine typing. Particular effort is made to advise and encourage those wishing to enter the library profession. Three of our assistants, graduating this Spring, are already enrolled for the fall term at library schools. Two earlier graduates will be returning to the staff this spring as professional assistants.

### *Quarters*

The problem of space for readers and books has continued acute, and will be increasingly so until we move to our new quarters in the Rutherford Library. We have been forced to continue placing little-used sets and volumes in dead storage. Work has continued all winter on the interior of the new library, but owing to delays in the delivery of hard woods, the completion of the building has again been delayed until December, 1950.

### *Cataloguing and Orders*

This Department consisted of the Chief Cataloguer, the Order Librarian, four full-time and three part-time assistants. Three months during the summer were devoted to the recataloguing of the Education Library (Edmonton). This library, which came to us in 1945 from the former Normal School was badly in need of this reorganization.

The work of placing typed book-cards and pockets in all volumes in the Library, preparatory to the setting-up of an improved circulation system in the new library, was carried on throughout the year. Work on card catalogues for the Agriculture

and Law reading rooms was continued. These were badly needed as formerly there was no card index to these collections except that in the Main Library.

During the year the Department ordered 3,769 titles; accessioned 7,676 volumes; catalogued 8,827 volumes, including 859 bound journals; lettered 5,717 volumes; withdrew 372 worn or out-of-date volumes; and typed 38,334 cards.

#### *Reference, Circulation and Periodicals*

Total circulation statistics of the Main Library were slightly down from those of 1948-49. The work of the Department has not decreased, however, since the greater demand for books, journals, and other special materials from the stack and for reference service has offset a lesser use of Reserve books. This would indicate that the students were doing more independent reading as opposed to the prescribed reading of the Reserve shelves. The staff consisted of seven full-time assistants (of whom three were professional) and 13 students assistants, employed at the desk during rush or evening hours, or in shelving books.

*Circulation*—During the year the circulation from the Main Library was 67,096, which includes: books and journals from the stacks 20,437; books from the Reserve shelves 43,056; special pamphlets, journals, etc. 3,176; and extramural loans from the Main Library, 409.

The Extramural loan service of the entire University Library was considerably heavier than last year with 1,577 books sent out by mail to 504 borrowers, as compared with 840 books sent to 369 borrowers in 1948-49.

#### *Reference, Periodicals, Binding*

In September Miss Joan Dafoe joined the staff as Reference Assistant, enabling us to increase and improve the reference service to students, and to lighten the heavy load on the Reference Librarian.

This Department is responsible for reference service to faculty members and students, for periodicals, and government documents, and for the binding of books and journals for the entire University library. During the year 1,083 current journal subscriptions were placed and recorded (an increase of 51 over the previous year); 2,192 periodicals and books were bound or rebound. The Interlibrary loan service increased again over last year; 132 items were borrowed for members of the faculty from other institutions and 245 items were lent to other libraries. We are pleased to find that this service to other universities is increasing, as we have for so long been the recipient of their kindness, without being able to reciprocate to any great extent. Forty microfilms were purchased for staff members engaged in research.

#### *Branch Libraries*

*Education Library (Edmonton)*—This has been the busiest year in the history of this branch library. The Education Librarian, with three full-time assistants, circulated 62,578 books and journals, an increase of more than 10,000 over the previous year. Extramural loans increased to 928 as compared with last year's figure of 559.<sup>a</sup> Since July 1st, 4,709 unbound journals were circulated, testifying to the amount of use that is being made of the Education Index during the first year in which we have subscribed to it.

During four months in the summer great strides were made in the recataloguing and reclassifying of the book collection according to the Library of Congress scheme.



This reorganization of the shelves and the possession of an adequate card catalogue greatly lightens the work of the library staff, and adds to the convenience of readers.

*Education Library (Calgary)*—This library serves the Faculty of Education at Calgary. The book collection consists of reference books, texts and general background reading for both Education and first year Arts.

During the year the Education Librarian, with a half-time assistant, circulated a total of 12,570 books and journals, and 810 items of pamphlet and picture material. Student attendance in the library was 19,952. Since this is an open-shelf library, these statistics fail to indicate the actual use of the books within the library. Instruction in library methods and the use of indexes and other reference material was given to all the students, and was reflected in their increased use of the various materials on the shelves and of the pamphlet and picture files.

*Medical Library*—This year for the first time since 1945 there has been a slight drop in the overnight circulation of books from this Reading Room, possibly attributable to the better availability of text books for student purchase. The library, however, has been used more for study during the day than formerly, and the medical and dental journals are being used increasingly, both for general reading and in the preparation of papers.

Total circulation for the year was 19,370; 3,074 items were circulated to rural and city doctors. Current subscriptions to medical journals now number 268, an increase of 13 over 1948-49; 272 bound journals were added to the collection. On interlibrary loan, 33 items were borrowed and 67 loaned to other libraries. During the year we sent 350 items, mostly unwanted duplicate journals, to other libraries and received in exchange 1,094 items needed to fill gaps in our bound journals. The Medical Librarian continued to give instruction in the use of the library to first year Medical, Dental, and Household Economics students.

*Agriculture Reading Room*—Since July this Reading Room has been for the first time in charge of a qualified librarian, Mrs. E. MacDonald. Under her supervision the entire book collection has been reorganized, a pamphlet file set up and indexed, government reports and bulletins rearranged, and the gaps filled. This reorganization, along with the completion of the card catalogue, and the provision of trained reference service, has added very greatly to the usefulness of this branch library. Attendance in the library was 7,994 and circulation for overnight use was 8,959. Since this is an open shelf library, no count is made of the books and journals used in the library.

The *Nursing and Chemistry Rooms*, each seating about 20, were used to capacity, and the latter was kept open during the noon-hour to accommodate students in Chemical Engineering. Heavy use is also made of this reading room by the Mining Engineering and Agriculture students. The number of readers in this library was 13,151, and the circulation 14,200. Statistics for the Mining Library, which has very little space for readers, were 599 circulation.

The *Law Library* continued to receive extremely heavy use. With 135 students registered in Law, it has been difficult to give them all adequate study facilities. The work of binding or re-binding hundreds of volumes in the collection, in poor condition after the war years, was continued, and many new books and sets were purchased to bring the library up to date.



### *Stock of Books*

During the year 3,320 titles were added by purchase and 359 by gift, making with bound journals, a total of 8,927 volumes; 372 volumes were withdrawn, giving us 106,750 accessioned volumes. In addition there are 12,025 accessioned volumes in the Education Library (Calgary) and some 10,000 volumes as yet unaccessioned in the Education Library (Edmonton), making a total book stock in the University Library system of approximately 129,000 volumes at March 31, 1950.

### *Radio Talks*

During the winter of 1949-50, 15 book talks were given by members of the University Library staff in the series "Books at Random" presented over CKUA, in co-operation with the Extension Library staff. This was the fifth session for this series.

*Sets of Special Interest*—The following are items of special interest purchased by the Library during the year:

Thorpe's Dictionary of Applied Chemistry in 9 volumes; The Canadian Abridgement, Howell's State Trials, in 34 volumes; Encyclopedia of forms and precedents, and Couch's Cyclopedia of insurance, in 12 volumes, for the Law Library; Schweitzer Lexikon in 7 volumes; Larousse du XX<sup>e</sup> siecle in 6 volumes; the Stationers Register, 8 volumes; Beethoven, Werke, in 24 volumes; Brahms, Werke, in 26 volumes. (These, together with the set of Bach's Works in 46 volumes purchased in 1948-49, constitute an extremely valuable music reference collection.)

### **Report of the Provost, Professor H. T. Sparby**

#### *Student Affairs*

Under the capable leadership of President Tevie Miller, Students' Council has had a successful year. There has been the usual number and variety of extra-curricular activities, including a full schedule of well conducted social functions, musical, literary and dramatic productions of commendable quality, and club meetings of all kinds. In addition to the annual Parliamentary Banquet, which was again very successfully carried out, the Students' Union this year acted as host to a group of civic leaders, including members of the Edmonton City Council, representatives of prominent city organizations, and the mayor of Calgary. It is intended that this "Civic" Banquet will also become an annual event.

A notable recent amendment to the Constitution of the Students' Union is an act to replace the "point system" of making certain awards to outstanding students. Instead of the awards being determined by the number of "points" accumulated by the students, the new act places discretionary power in the hands of the Students' Council acting as an awards committee. Specifically, Council is empowered to award annually a limited number of gold and silver rings to students who have made outstanding contributions to student life on the campus.

Students' Council has given considerable study during the past year to the problem of maintaining student interest in class organizations. Two of the four formal class dances scheduled for the year were unsuccessful because of lack of student support, and the inter-year play competition was not held. Some members of Council particularly are anxious to revive interest in class organizations because they believe that these organizations, by cutting across faculty lines, help to maintain student loyalty to the University as a whole.

### *Residences and Fraternities*

On the whole, this has been a normal year in so far as student life in the University residences is concerned. The Wardens, Miss M. Simpson, Dr. D. Healy and Mr. A. Ryan, and the Chairman of the Men's and Women's House Committees, Mr. D. Engles and Miss M. Griffiths, have provided good leadership.

There has been no change in the number of fraternities and sororities on the campus now for several years. The Inter-Fraternity Council, representing the eight men's fraternities, and the Pan-Hellenic Council, representing the four women's sororities, are, however, showing signs of a growing interest in the supervision of fraternity affairs. This year, for example, the Inter-Fraternity Council completely revised its constitution and also approved several bylaws aimed at regulating fraternity life.

### *Committee on Scholastic Standing*

In addition to its regular work this year, the Committee has reviewed and refined the regulations under which the eligibility of students for participation in extra-curricular activities is determined. The need for this revision arose out of the question of partial students taking part in activities.

In general, the plan finally approved was as follows:

- (1) Students representing the University in competition with outside organizations must be full-time students with satisfactory scholastic standing.
- (2) Students participating in non-competitive University activities which are open to the public must also meet the requirement of satisfactory scholastic standing, but may be partial students.

The only significant result of the changed regulations is that partial students are made eligible to participate in non-competitive activities.

### *Board of Governors' Student Activity Awards*

Mr. Tevie Miller, President of the Students' Union, presented to the Committee on Student Affairs at its fall meeting a proposal that the Board of Governors be asked to recognize in a tangible way the services rendered to the University by students who carry heavy responsibilities in the field of student affairs on the campus. The proposal was endorsed by the Committee on Student Affairs and forwarded to the Board of Governors, who approved it and decided to implement it by instituting a series of "Student Activity Awards".

These awards are five in number, payable annually in two instalments, the first on December 1 and the second on March 1. They are awarded to the students occupying the following positions, providing of course that the services which have been rendered are considered to be satisfactory:

President of the Students' Union .....	\$300
Editor-in-Chief of The Gateway .....	200
Vice-Chairman of the University Athletic Board .....	200
Director of Evergreen and Gold .....	150
Treasurer of the Students' Union .....	150

Although the plan was not finally approved until February, the second instalments of this year's awards were paid to the students concerned.

### *Students' Union Building*

The corner-stone of the Students' Union Building was laid by Premier Manning on July 11, 1949, and it is confidently expected that the first unit of the building

will be completed and furnished in time for the opening of the 1950 summer session. The accommodation provided by this first unit consists mainly of lounges and offices. During the past year, a concerted drive has been made to raise funds for the furnishings, estimated to cost about \$65,000. A committee of business men, headed by Mr. F. G. Winspear, and the Alumni Association, under the leadership of the secretary, Mr. J. W. E. Markle, have played a prominent part in this drive.

The Students' Council and the University Administration have agreed on plans for administering the building. In general, the University will assume most of the costs of operation and maintenance, including the cost of heat, light, water, and caretaking services, while the students will be responsible for the replacement of furniture and other equipment, and certain operating costs such as telephone charges. It is planned to cover these student costs, as well as repayment of the Government loan, by increasing the Students' Union building fee from \$8 to \$10 per student. Jurisdiction over the use of the building by individual students and student organizations is being vested in a "Union House Committee" set up by and responsible to the Students' Council, although it is understood, of course, that the Provost and the Adviser to Women Student will have the same authority over students in the Students' Union Building as elsewhere on the campus.

At the annual Color-Night ceremonies, held this year on March 17, the Students' Council recognized the invaluable services rendered by six men to the cause of the Students' Union Building by conferring on them honorary life memberships in the Students' Union. The men were Dr. J. W. Neilson, Mr. B. W. Pitfield, Mr. W. G. Pybus, Prof. L. A. Thorssen, Mr. F. G. Winspear, and Mr. G. K. Wynn.

### **Report of the Chairman of the Committee on Physical Education, Dr. P. S. Warren**

The Committee on Physical Education wish to report a very interesting and successful year in the Department of Physical Education. Among the many activities within the Department, the following as reported by Professor Van Vliet may be noted.

#### *Intramural Program*

Mr. H. J. McLachlin of the Department of Physical Education, who acted as Director of Intramural Sports, reports a growing interest toward participation in intramural sports. These sports were initiated with a view to obtaining the greatest student activity in all sports, rather than a one-University-team idea. This year we have a clear demonstration that the experiment is successful.

#### *University Athletics*

The Department continues to co-operate with the students in the organization and operation of the athletic program. During the 1949-50 session the Department members assisted in the athletic program in the following ways:

Miss E. Fildes—Referee and Coaching School; coaching tennis, badminton and basketball.

Miss P. Austin—Referee and Coaching School; coaching swimming and volleyball.

Mr. H. J. McLachlin—Coaching track and field.

Mr. W. D. Smith—Coaching junior basketball.

Mr. M. L. Van Vliet—Chairman Athletic Board, and coaching senior basketball.

### *Teacher Education*

For the past several years five different courses have been offered in physical education as options for students in the Faculty of Education. Beginning in September 1950, this arrangement will be completely revised with the introduction of a Bachelor of Education degree in Physical Education. This four-year course will provide professional preparation for students planning to teach health and physical education in the schools, act as supervisors of physical education in cities and school divisions and serve as directors of physical education or recreation for private and public organizations.

### *Graduate Studies*

Staff members of the Department of Physical Education are presently engaged in graduate studies or are making such plans for the future. Mr. Eriksson and Mr. Van Vliet will continue work toward the doctorate degree during the 1950 summer session, Miss Austin recently completed her master's degree at Columbia Teachers' College, Mr. McLachlin and Miss Fildes have arranged to continue work toward the master's degree in the spring and summer of 1951, and Mr. Smith has asked for permission to begin work toward the doctor's degree in 1951.

### *Outside Activities*

During the past year members of the Department have made many valuable contributions to the Province of Alberta. Mr. Van Vliet as Chairman and Miss Austin, Mr. Smith and Mr. Eriksson as members of the Provincial Curriculum Revision Committee in Physical Education have assisted in the development of a new course of study for grades 1 to 6 which is to be published before September of 1950. Mr. McLachlin has served as President of the Edmonton City Basketball League and Northern District Organizer. Mr. Smith held the office of Secretary-Treasurer of the Edmonton City Basketball League and assisted the Alberta Branch of the Canadian Red Cross, both as an examiner in aquatics and as a member of the Provincial Board. Mr. Eriksson has been active in the St. John Ambulance and is presently the Secretary of the Canadian Association of Health, Physical Education and Recreation. Miss Fildes, currently rated the number two lady in Canadian tennis, is serving as a consultant to the Alberta Tennis Association. Mr. Van Vliet assisted the Health and Recreation Branch of the Department of Education by acting as director of a province-wide basketball school.

### *Degree Course*

It is with a great deal of anticipated pleasure and professional pride that the members of the Department look upon the introduction of the degree course in physical education. This course should not only provide leaders in this field for the Province of Alberta, but should improve the level of instruction and supervision in such a way that thousands of school children will be affected in matters of swimming, water safety and life-saving, co-ordination, poise and grace, recreational skills and growth and development generally.

### **Report of the Director of Student Medical Services, Dean J. W. Scott**

The activities of the Student Medical Services have followed the usual lines during the past session. We carried out complete physical examinations of 1,040 new students last Autumn, of whom 630 were men and 410 were women. These



examinations have been provided not only from the point of view of giving our own organization a knowledge of the health of the students on admission, but are also of value in advising the Department of Physical Education as to the type of physical effort a student may be required to perform during the year.

The Provincial Department of Tuberculosis has given co-operation by taking miniature chest films of new students and any others interested. No active cases of tuberculosis were detected among our student population. Dr. J. F. Elliott has again carried out skin testing for tuberculosis among medical students and first year B.Sc. nurses. All those who reacted as positives were offered immunization by B.C.G. This procedure is now an accepted one in most medical schools on this continent.

The health of the students has been generally good during the past year except for an epidemic of rubella which occurred during the winter, involving 87 men and 39 women students. The quarantine of this group created some problems. However, through the co-operation of Mr. Whidden and Mr. Lister we were able to provide quarantine facilities in Athabasca Hall during the height of the epidemic.

The Infirmary has been very active, particularly in the care of out-patients. As was noted in the report of 1948-1949, our waiting room facilities are inadequate, and it is to be hoped that these can be extended shortly.

We are still somewhat concerned about the increased cost of medical care necessitated by the increased cost of hospitalization and diagnostic investigation in the University Hospital. It is altogether likely that there will be a deficit this year. The action of the Board of Governors in increasing the Student Medical Services fee will help in this regard. I would like to point out that the amount of medical services given to our student population for a fee of \$7.00 over an eight-month period has been expanded greatly within the past few years.

During the session we added Dr. S. S. Spaner to our staff as Psychiatrist. He has given very valuable service in the investigation and treatment of student problems in the field of the psychoneurosis and the psychoses of which we seem to have an increasing number each year.

Dr. J. F. Elliott and Dr. M. M. Cantor have both given very useful service in the care of sick students. Miss A. Revell, acting as Matron at the Infirmary, has been a tower of strength to us.

May I again state that the medical staff of the Student Health Services would like to express their appreciation to Dr. P. S. Warren, Chairman of the Student Health Services, for his tireless interest and wise advice.

### **Report of the Officer Commanding, University of Alberta Contingent of the Canadian Officers' Training Corps, Lt.-Col. D. M. Healy**

The officers of the contingent for the academic year were:

Commanding Officer—Lt. Col. D. M. Healy, MBE.

Contingent Officers—Major H. J. Bishop, Capt. J. K. Heath, MC, Lt. J. P. Jorgensen.

Resident Staff Officers—Major M. J. Egan, Major J. E. Pincock.

One hundred and three Officer Cadets were on strength at the beginning of the year. Of these, 59 continued their theoretical training, the remainder were struck off strength for the following reasons: 10 were commissioned as Second Lieutenants Canadian Army (Active Force), 29 qualified and were appointed to the rank of

Lieutenant and transferred to the Canadian Army (Supplementary Reserve), 1 transferred to McGill University, 1 failed practical phase, 1 failed academic year, and 2 voluntary withdrawals.

At the end of the academic year, the number of Officer Cadets qualified for commissions but not returning to Corps School for further training was 10, qualified in the rank of Lieutenant.

Therefore, of the 59 members of the Contingent, 49 will again attend summer camps; 16 will qualify as Captains and 33 as Lieutenants.

In April, 24 other candidates were taken on strength and assigned to various Corps in the Army. Seventy-three Officer Cadets will therefore take summer training in 1950.

On the 10th of March, 1950, a conference of officers from the four western universities was held at the University of Alberta. The Conference discussed the programme of the Canadian Officers' Training Corps and made recommendations to the appropriate Army authorities.

The Annual Ball was held in November, jointly sponsored by the University Naval Training Division and the Royal Canadian Air Force Training Flight. It was a qualified success because it was not well attended.

On the 15th of March, a Mess Dinner was held at the Prince of Wales Armouries. The former Commanding Officers of the Contingent and a number of senior staff officers from Headquarters Western Command were able to attend.

This year new accommodation for the Canadian Officers' Training Corps and the Royal Canadian Air Force Training Flight was made available in the Drill Hall. It consists of an Orderly Room, a Lounge and a lecture room. The Canadian Officers' Training Corps purchased furniture for the Lounge, making it a well appointed and comfortable room for the use of all members of the Contingent. The University Naval Training Division and the Royal Canadian Air Force Training Flight have been invited to use this lounge, as guests of the Canadian Officers' Training Corps.

During the year Dr. Douglas E. Smith of the Faculty of Arts and Science gave a series of lectures on Military History.

In January, the Resident Staff Officer, Major M. J. Egan, was posted to the General Staff Branch at Army Headquarters in Ottawa, and was replaced by Major J. E. Pincock, who came here from the Adjutant General's Branch, at Army Headquarters.

The Adjutant of the Contingent, Lt. J. P. Jorgensen, has been selected for summer employment by the Active Force and will serve at the Royal Canadian School of Infantry in Calgary.

### **Report of the Commanding Officer of the University Naval Training Division, Lieut. R. E. Phillips**

The University of Alberta Naval Training Division completed its winter training program of sixty hours instruction at H.M.C.S. Nonsuch on March 27, 1950.

During the summer of 1949, 25 Cadets spent five months at H.M.C.S. Naden at the Pacific Coast and two Cadets, who are taking Electrical Engineering, were sent to the Electrical School at H.M.C.S. Stadacona, Halifax, Nova Scotia, for five months.



Seventeen new students were taken into the Division at the start of the fall term and were promoted to Cadets in February of 1950. Early in March an Officer's Selection Board was held and 8 senior Cadets were recommended for their commissions as Sub-Lieutenants in the R.C.N.(R).

The total active complement of 40 Cadets is made up of 17 first year, 7 second year, 8 third year, 6 fourth year and 2 fifth year Cadets. With the exception of one or two graduating students, it is expected that these 40 Cadets will spend the full summer in training ashore and afloat at the Pacific Coast.

### **Report of the Officer Commanding RCAF (Reserve) University Flight, Squadron Leader L. E. Gads**

Upon the termination of the university session 1948-49, the 25 cadet members of this Unit attended an Officers' Indoctrination Course at Abbotsford, B.C. The course lasted eight weeks and was an unqualified success. Besides providing a series of interesting and instructive lectures, the camp gave the students an opportunity to meet fellow students from the four western universities which served to broaden their outlook and to promote comradeship.

After the camp, cadets were posted to various RCAF units throughout the NWAC for contact training in fields related to their courses of study at the University. On their return to the University in the fall, cadets were unanimous in stating that they had had both a profitable and an enjoyable summer.

During a conference held in July at Ottawa, where the representatives of ten Canadian universities and high RCAF officials met, plans for the 1949-50 session were discussed. It was decided to extend formal technical training during the summer and to hold the next camp in Eastern Canada where RCAF Training Command schools could be used for the purpose.

The results of the recruiting campaign in the fall were rather disappointing. Although the Unit was able to fill its quota of 35 cadets, the standard of the applicants was not of as high a calibre as could be desired. The fact that the offices were not ready for the campaign did hamper the work somewhat, but there was a general lack of interest on the part of students. With the offices now being completed, it is hoped to get the campaign off to a good start next year.

There was a change in the chain of command, the Unit severing its connection with the 418 Squadron and becoming an independent unit under the RCAF Station Edmonton. This was an improvement in so far as the chain of communications was concerned.

Flight Lieutenant B. Riddell, Department of Pharmacy, joined the unit as its Adjutant and greatly assisted the Officer Commanding and the Resident Staff Officer, Flight Lieutenant J. Gillmore, in interviewing students and supervising lectures. Squadron Leader Gads has carried on the duties of RCAF Liaison Officer which involved contact with RCAF Personnel in attendance at University not on the strength of the Reserve Flight.

The winter training program for the 2nd year cadets began in October and consisted of 25 lectures delivered by the Unit administrative officers, regular RCAF Officers and members of the University staff. Dr. P. S. Warren gave a series of lectures on Military Geography, Dr. W. H. Johns on United Nations and the Atlantic Pact, Mr. T. F. Wise on Economics of Defence. These lectures were accom-

panied by a systematic review of current events, the students taking turns in summarizing the news and discussing its significance. Good practice in public speaking was thus provided.

The new cadets began their winter training in January, after their selection and appointment was confirmed by Air Force HQ in Ottawa. They had fifteen lectures which included basic information concerning RCAF as well as lectures on Military Geography of Canada given by Dr. R. E. Folinsbee. Weekly reviews of current events and discussions of the important news of the day were conducted. Films were shown to illustrate topics under discussion.

The University RCAF Unit sponsored jointly with the COTC and UNTD a United Services Ball to which Army, Navy and Air Force chiefs were invited.

The joint COTC-RCAF Lounge in the Drill Hall was not completed in time to be used for social gatherings, but plans are under way to make extensive use of it next session. Magazine subscriptions were obtained to a number of periodicals and it is hoped that with the completion of the Students' Union Building nearby, the lounge will be used profitably by the cadets.

Flight Lieutenant J. H. Gilmore, who has served so competently for two years with this unit as Resident Staff Officer, has been posted to Whitehorse and is being replaced by Flight Lieutenant J. Woods. With the new accommodation at the Drill Hall now available, Corporal Dopp came on duty to do the clerical work which speeded up the routine administration and documentation procedures.

Plans are complete for a 7½-week indoctrination course for the new cadets, to be held at London, Ontario, during May and June, after which they are to be posted to training schools in the Training Command for the remainder of the summer. Ten Canadian universities which have University (Reserve) Flights will be represented at the camp. Officers Commanding, Resident Staff Officers and Adjutants of all units will assist at this camp. An interesting program of lectures is planned.

Last year's cadets will be posted to training schools for technical training consistent with their courses of study at university and non-technical personnel will go to various units across Canada for contact training in their line.

It is felt that besides the training provided, an air trip to Eastern Canada and the opportunity of meeting fellow students from all over Canada will be an invaluable experience.

At present the strength of the Unit consists of 22 second-year cadets, 34 first-year cadets. Some of these were not able to accept the training and employment with the RCAF during the summer and may be leaving the Unit. Next year another new intake of 35 cadets is anticipated which will bring the Unit to its normal complement of 3 intakes.

The administrative personnel of the Unit were satisfied with the attendance at lectures and the interest exhibited, and anticipate good results from this summer's camp.

### **Report of the Radio Secretary, Miss Margery W. MacKenzie**

The University of Alberta this year resumed the broadcasting of all its programs from studios on the campus. This resumption of broadcasting from the University was made possible by the fact that the University broadcasting equipment, which had been on loan to CKUA since its operation was taken over by the Alberta Government Telephones in 1945, was all returned and reinstalled in the University studios by the end of the summer 1949.

The University utilized approximately the same amount of broadcast time this year as in the past several years. Of the three hours a day, five days a week of broadcast time presently allotted to it, one hour a day, a noon music hour, has been left for the present in the hands of the CKUA staff. The other two hours a day have been, as in the past, early evening hours. One hour of these has been devoted to good music. The other hour has included programs dealing with literature, drama, music, science, agriculture, household economics, educational research, adult education and world affairs.

During the University term members of the University of Alberta faculty have assumed responsibility for the broadcast of eleven regular program series, involving 200 programs of 15 or 30 minutes duration and totalling 60 hours of broadcasting. In addition to these, two series, the Music Hour, with five hour-long broadcasts a week, and the Alberta Farm and Home Forum with three 15-minute broadcasts a week, continue throughout the entire twelve months of the year. These constitute an additional 300 hours of broadcasting.

Operating and announcing the University programs have been handled during the University term by three students under the direction of the Radio Secretary.

As a convenience to broadcaster, 124 programs were transcribed this year in the University studios, and were presented as recorded programs. As a result of a request from the manager of the small radio station in Dawson, Yukon Territory, approximately 50 transcribed talks and discussion, already presented over CKUA, have been sent there by air for rebroadcast. These transcriptions are also to be circulated among several other 100-watt stations in the far North. As other suitable transcribed programs become available, they also, with the consent of the broadcaster, will be forwarded to Dawson.

Publicity of University programs was undertaken this year by the distribution of printed program schedules, "The University of Alberta—On the Air". Six program schedules were distributed to cover the programs of the winter term and three to cover the summer programs. Obtainable on request, these program guides have been requested by listeners in all parts of Alberta, including the extreme North and the extreme South. Two thousand copies of each program schedule were distributed.

Following are the program series presented by the University of Alberta during the 1949-50 year. Except where otherwise stated the programs were of 15-minute duration.

#### *Alberta Farm and Home Forum*

Convener: E. B. Swindlehurst (Prov. Dept. of Agriculture)—150 programs.

Presented jointly by the Provincial Department of Agriculture and the University of Alberta these forums are broadcast three times a week throughout the entire year, over CKUA in Edmonton and CJCJ in Calgary.

#### *Behind the Headlines*

Convener: H. B. Mayo—22 programs.

Members of the University faculty, as well as outstanding speakers visiting the city, contributed talks to this series of programs dealing with current national and international problems.

#### *Books at Random*

Convener: F. Macleod—22 programs.

For these programs members of the staff of the University Library and the

University Extension Library reviewed books of a widely varied nature, obtainable by out-of-town borrowers from the University Extension Library.

#### *The Chimney Corner*

Convener: J. T. Jones—23 programs.

Comprising selected readings from good books, this series was presented mainly by faculty members of the Department of English.

#### *Curtain Going Up*

Convener: M. W. Mackenzie—12 ( $\frac{1}{2}$  hr.) programs.

Recordings of scenes from plays of Shakespeare as performed by notable actors made up the majority of these programs.

#### *Faculty of Education*

Convener: J. W. Gilles—22 programs.

Included in this series were a number of discussions based on the recent Report to the Canadian Education Association which dealt with a program of action to improve the status of Canadian teachers.

#### *Music Hour*

Convener: M. W. Mackenzie—260 (1 hr.) programs.

Presented from 7 to 8 in the evening, Monday through Friday, throughout the entire year, these programs feature chamber music, choral and solo instrumental music, opera and symphony for the first four programs of the week. The Friday evening program takes the form of a Listeners' Request Concert.

#### *Musical Sketches*

Convener: A. B. Crighton—11 ( $\frac{1}{2}$  hr.) programs.

Prepared by students, these consisted of radio adaptations of illustrated discussions of music and composers presented originally in a music laboratory period.

#### *Western Board of Music*

Convener: R. S. Eaton—14 ( $\frac{1}{2}$  hr.) programs.

Presented by 14 Edmonton musicians and teachers, these programs illustrated music from the piano, violin and 'cello syllabus of the Western Board of Music.

#### *Why Stop Learning*

Convener: D. D. Campbell—21 programs.

This series outlined the work being done by the University's Department of Extension.

#### *Wonder Box*

Convener: Z. J. Oliver—21 programs.

Radio adaptations of familiar fairy tales were presented by students in the Faculty of Education under faculty direction.

#### *World of Science*

Convener: D. B. Scott—10 programs.

These programs offered glimpses into many of the fields of scientific endeavor with which the University is concerned.

#### *Your Home and You*

Convener: M. Patrick—23 programs.

Dealing principally with many of the problems of the homemaker, this series,

presented by faculty members of the Department of Household Economics, included several programs describing food service at the University.

Through its own initiative and with the assistance of Radio Service and CKUA, the Student Radio Society has continued to provide training and experience in various radio techniques. Under its auspices six program series of varying duration have been presented in the course of the University term. They included: Campus Report, Green and Gold Sports, Sunday Song, Calling Home, Student Talent Series and Kampus Keyboard. In addition, a number of musical and sport events were broadcast by the students. For all of these programs technical operation, continuity-writing and announcing were handled by the students themselves.

### **Report of the Director of the Western Board of Music in Alberta, Professor R. S. Eaton**

The activities of the Western Board of Music continued to expand during the above period, reflecting the steady growth which has been experienced in the past few years.

#### *Examination Statistics*

<i>Candidates</i>	Practical	Theoretical	Total
February, 1950 .....	67	251	318
*May, 1950 .....		294	294
*June, 1950 .....	816		816
	<hr/> 883	<hr/> 545	<hr/> 1428

(\*Incomplete totals, compiled April 15, 1950)

Therefore, an increase of at least 187 candidates is indicated.

#### *Centres*

##### *Practical*

February, 1950—Calgary, Edmonton, Red Deer, Bowden.

June, 1950 — 24 centres, including Calgary, Edmonton, Lethbridge, Pincher Creek, Coleman, Drumheller, Red Deer, Holden, Ponoka, Innisfail, Alix, Bonnyville, Fort Kent, St. Paul, Glendon, Falher, Girouxville, Edson, McLennan, Rycroft, Peace River, Grande Prairie, Donnelly, and Lacombe.

##### *Theoretical*

February, 1950—24 centres throughout the Province.

May, 1950—35 centres throughout the Province.

*Examiners*—Dr. Arthur Egerton, Montreal; Mr. Glenn Nelson, Vancouver; Mr. W. Knight Wilson, Regina; Mrs. W. G. Egbert and Mr. Leonard Leacock, Calgary; Mrs. Beulah Doney, Mr. A. B. Crighton, and Mr. R. S. Eaton, Edmonton.

*Diplomas Granted*, Fall Convocation, 1949—Licentiate, Miss Phyllis Horne, Calgary, Organ; Associate, Miss Catherine Morrison, Stettler, Pianoforte; Miss Betty Pugh, Sylvan Lake, Miss Lillian Kester, Edmonton, Miss Margaret Ann Brine, Edmonton, Pianoforte; Miss Ruth Gillis, Edmonton, Singing.

#### *Violoncello Syllabus*

A syllabus for Violoncello examinations up to and including that for the Associate Diploma was prepared and distributed in January. The syllabus has already attracted several candidates for the June, 1950, examinations.

#### *Broadcasts*

Fourteen programmes illustrating pieces from the Western Board of Music syllabus were presented over Station CKUA. Notices of these broadcasts were



mailed each month to music teachers within range of CKUA. We are most grateful to the fourteen Edmonton teachers who have so generously donated time in preparing and taking part in these programmes.

### *Recitals*

Successful presentations of awards at regional recitals were held during late September, October, and November in six centres: Calgary, Edmonton, Red Deer, Bonnyville, Grande Prairie and, for the first time, Lethbridge. At the expense of the Western Board, several young artists from Calgary and Edmonton visited these centres to take part in the programmes as guest artists. They contributed much to the success of the recitals, and themselves received valuable experience in giving public performances.

### *Scholarships, Bursaries, Prizes*

More than \$4,000 was awarded in the form of scholarships, bursaries, and prizes to outstanding candidates. The Western Board wishes to express its appreciation to the welfare organizations, service groups, corporations, business men and private individuals who continue to make these awards possible.

A significant contribution to music in the province was the granting, for the second consecutive year, of ten bursaries of \$100 each by the Government of Alberta.

The Gold Medal offered by the Board of Governors to the candidate receiving the highest standing in completing the final examination of the A.Mus. (Alberta) was awarded to Miss Lillian Kester of Edmonton. Twenty-seven silver medals were presented.

### *Advisory Service*

In the past year advisory services to music teachers have been expanded to include, in addition to all forms of written assistance, the sending out of certain syllabus material for perusal. This has been of particular value to rural music teachers.

## **Report of the Director of the Summer Session, Professor G. M. Dunlop**

### *Registration and Attendance*

The advance registration for the University of Alberta Summer Session reached the total of 1,893. Cancellations were received from 173 students while 219 students registered but did not attend. As a consequence only 1,501 students appeared for classes. A summary of the attendance figures follows:

	Veterans			Civilians			Faculty Total
	Men	Women	Total	Men	Women	Total	
Education .....	146	11	157	412	738	1150	1307
Arts and Science .....	22	2	24	49	37	86	110
Engineering .....	7	.....	7	4	.....	4	11
Agriculture .....	4	.....	4	.....	.....	.....	4
Pharmacy .....	4	.....	4	1	.....	1	5
Nursing .....	.....	.....	.....	.....	4	4	4
Household Economics .....	.....	.....	.....	.....	1	1	1
Commerce .....	1	.....	1	.....	.....	.....	1
Specials and Auditors .....	.....	.....	.....	9	8	17	17
<b>Total</b> .....	<b>184</b>	<b>13</b>	<b>197</b>	<b>475</b>	<b>788</b>	<b>1263</b>	<b>1460</b>
Calgary .....	11	.....	11	30	.....	30	41
<b>Total</b> .....	<b>195</b>	<b>13</b>	<b>208</b>	<b>505</b>	<b>788</b>	<b>1293</b>	<b>1501</b>



### *Comparative Summary of Attendance*

<i>Faculty</i>	1948	1949
Arts and Science and Others .....	133	136
Education (Edmonton) .....	1272	1307
(Calgary) .....	42	41
Education (Total) .....	1314	1348
<i>Percentages by Faculties</i>		
Education Students .....		89.81%
All Other Students .....		10.19%

#### *Instruction*

The Summer Session staff was composed of 37 members of the University staff, 12 instructors drawn from the Department of Education, 19 instructors drawn from the school systems of the province and elsewhere, and 18 visiting instructors. The total number of instructors was 86.

The visiting instructors included Miss Violet Archer of Yale University; Dr. K. F. Argue, University of British Columbia; Miss Hazel Baggs, Toronto Public Schools; Miss Anne Cameron, Department of Education, Toronto; Professor G. Davies, University of British Columbia; Miss Gladys Dickson, Toronto Public Schools; Dr. W. E. Dugan, University of Minnesota; Dr. Mack Eastman, University of Saskatchewan; Miss Mabel L. Everett, Cleveland, Ohio; Dr. John Irving, Victoria College, Toronto; Dr. W. J. McIntosh from Toronto; Dr. E. T. Mitchell, University of Texas, Austin, Texas; Mr. M. Popovich of Yale University; Dr. S. Prevey of Kansas City, Missouri; Miss Ruth E. Ratz, Toronto; Mr. J. Shaw, University of Minnesota; Brother Thomas from Memphis, Tennessee; and Mrs. L. Tourigny, Moosomin, Saskatchewan.

I have received several excellent reports concerning the work of all visiting instructors.

Many of the courses suffered from heavy enrollments. This was attributable in the majority of cases to the fact that certain courses are degree requisites in all Education programs. I do not anticipate any change in this situation. In other cases such as Classics 57, given by Dr. W. G. Hardy, and Education 208 and 508, given by Dr. Dugan and Mr. Shaw, the large enrollment is attributable to the popularity of the instructor or to changing emphasis in educational thought. Presumably both these factors will continue to be operative.

In the light of our experience last year only two instructors were asked to teach more than a single course. Dr. Gilles and Miss G. Duggan each taught a full course and an additional half course. It seems advisable to keep more than normal instructional loads to a minimum.

#### *Courses*

Eighty full courses and 3 half courses were offered during the Summer Session. There were 22 laboratory courses in which are included Shop, Drama, Music and Mathematics laboratory courses as well as those in the physical sciences. Seventy-seven courses were offered in Edmonton and 6 in Calgary.

This year three courses on the Grade XII level, Social Studies XII, English XII and Biology XII were offered, at the request of the Department of Education, for the convenience of experienced teachers with incomplete matriculation.

While registration was sufficient to cover the cost of the courses I have arrived at the conclusion that we have reached the point of diminishing returns in these

subjects and would recommend that the practice of offering Grade XII courses be discontinued.

### *The Problem of Student Preparation*

Last year it was found that one of the greatest weaknesses of the Summer Session program seemed to be lack of adequate preparation by students for the courses in which they were registered. In accordance with my recommendation of last year a list of probable courses was published in the Alberta Teachers' Association magazine in November and registration commenced at that time. The Summer Session Announcement was made available early in January. The net result was that students registered months earlier than has usually been the case. Members of the Students' Council assured me that earlier registration had made possible more adequate preparation for the work of the summer. This conclusion was supported by the opinions of several of the instructors.

While the response of instructors and students on the matter of earlier registration was limited I would recommend that the procedures for facilitating early registration employed last year be continued.

I am fully aware, however, that early registration does not necessarily imply better preparation of students for their courses. From observation of Summer Sessions conducted elsewhere as well as in Alberta I have reached the conclusion that the most ideal setup would be achieved by lengthening the Summer Session period rather than by elaborate pre-session study programs. Since the teachers have only two months away from their duties it does not seem opportune to increase the length of the Summer Session materially at this time. I would recommend, however, that it be increased to the extent of placing the two days of final examinations on the Monday and Tuesday of the seventh week. This would insure approximately six weeks of instruction and would permit a long weekend of study before the examinations commenced.

### *Provost, Adviser to Women and Wardens*

Professor Victor E. Graham seems to have taken the responsibilities of his office as Acting Provost and Warden of Assiniboia Hall quite seriously. I felt that he realized clearly the nature and importance of his role in the Summer Session. To the best of my knowledge he discharged his responsibilities in a highly satisfactory manner. Miss Simpson assured me that Mr. Graham's close co-operation with her in the Summer Session's social affairs had the effect of lightening her burden. Mr. and Mrs. Graham are to be commended for entertaining all of the students of Assiniboia to coffee in the Warden's suite.

Miss Simpson, in her capacity of Adviser to Women, seems to have made quite a contribution in counselling students with regard to future study. I feel that she is playing an increasingly important part in the life of the Summer Session in encouraging and guiding women students both in academic and personal matters. Her work in entertaining visiting instructors and seeing that they were taken on tours of the city and surrounding country seemed especially worthwhile. Her organization of the student activities as Warden of Pembina Hall impressed me as admirable. Miss Muriel Caldwell, Warden of Athabasca Hall, has co-operated well with the Adviser to Women and the Provost. I have heard nothing but good reports concerning her work.

In my opinion we are fortunate in having a person of the calibre of Miss Simpson holding the position of Adviser to Women and Warden of Pembina. Being a permanent official, she has, in effect, furnished leadership to both Mr. Graham and Miss Caldwell.

### *Special Events Program*

This year the Special Events Program consisted of three addresses, two musical evenings, one recital of choral music and two performances of the Drama Workshop Production. The three speakers received an honorarium each of \$25. The addresses were excellent in quality and were delivered by persons competent in the fields in which they spoke. Attendance was definitely superior to that of last year. It has been suggested that since the Summer Session dances occur on Friday, it might be wise to have the public addresses at another time. I would recommend that next year one or two of the addresses be delivered on Wednesday evenings in an effort to discover whether attendance might thereby be improved. The Sunday evening organ recital of Mr. L. H. Cluderay was highly successful. The music appreciation evening of Miss Violet Archer was less successful by reason of difficulties resulting from the movement of the speaker from piano to victrola which made use of a loud speaker impossible. An improvement in planning of such evenings will be necessary. The choral recital of the combined music classes under Mr. Cluderay and Miss Violet Archer was one of the most enjoyable evenings of the session. The Drama Workshop Production under Professor Orchard and Mr. Popovich also received general commendation.

### *The Calgary Branch*

The Calgary Branch of the Summer Session was again under the direction of Mr. James Fowler. Six courses in industrial arts were offered. I devoted a full day to the inspection of the Calgary classes and found a highly satisfactory type of work in progress.

Registration in the Calgary Branch consisted of 41 students as opposed to 42 who took courses last year. The great difficulty encountered in planning for the industrial arts courses offered in Calgary lies in the fact that registration tends to be low and course costs tend to be high. I asked Mr. Fowler what was the trend in registration. He suggested that, in his opinion, attendance must continue to decline due to the fact that the only teachers who attended the Calgary Summer Session were already in the teaching profession and were attempting to change over from academic instruction to instruction in industrial arts. I would seem, therefore, that we must plan for declining registration and further reduction in the number of courses in the Calgary Summer Session.

### *Student Affairs*

The President of the Students' Union of the Summer Session, Miss Mona Ward, proved to be both experienced and efficient in the management of student affairs. Two meetings of the Students' Union were held during the Summer Session as is required by the constitution of the Union. The usual social and athletic activities of the Union seem to be carried through in a satisfactory manner.

This was the first summer during which a compulsory Students' Union Building Fund fee of \$1.50 was collected. In addition to this the Students' Council conducted a highly successful campaign for voluntary contributions to the Students' Union Building Furnishing Fund, raising the sum of \$353.00.

Liaison between the student governing bodies of the Summer and Winter Sessions of the University is becoming more important. When the Students' Union Building is completed closer working arrangements must be worked out. A step in this direction was taken this year when the Secretary-Accountant of the Winter Session, Mr. Dinwoodie, acted as Secretary-Accountant of the Summer Session. A meeting of the President of the Winter Session with a committee of the Summer Session Executive resulted in an agreement to the mutual advantage of each body. The Summer Session Executive also appointed a liaison officer to represent the Summer Session Executive at meetings of the student governing body during the winter, when invited to do so, and when matters of common concern are under consideration.

The Summer Session tends to feel a sense of isolation from the Winter Session. I am striving to "build bridges" between summer and winter as I have indicated above. Realizing that the Summer Session is of only six weeks duration and that many of its members will never attend University during the winter, it would seem that student officials of the Winter Session might profitably associate themselves with the Summer Session and its activities wherever possible. This has been done in fair degree by Messrs. Pybus and Miller as well as by the Secretary-Accountant, Mr. Dinwoodie. The acceptance of a share of the responsibility of financing and furnishing the Students' Union Building by Summer Session students has also tended to make for a co-operative spirit. I recommend that every effort be made to induce the students of the Summer Session to become more conscious of belonging to the student body of the University.

#### *The Routine of the Summer Session*

The Get-Acquainted Tea for the staff of the Summer Session and their wives was quite successful. The staff meeting held on the evening of the second day was well attended and served a useful purpose in acquainting instructors with the routine of the Summer Session. Each staff member was asked to make suggestions for the improvement of instruction in his course and in the Summer Session generally. Eighteen members of the staff responded.

Memoranda was sent out to all instructors on five occasions when it seemed advantageous to do so. Generally, they proved useful, although there is some evidence that they are not carefully read.

Visiting instructors were invited to many private homes. In addition Miss Simpson, as Warden of Pembina, and Mr. Graham, as Warden of Assiniboia, entertained them at dinner in residence. Miss Simpson organized a motor tour for visiting instructors living in residence. Many faculty members devoted considerable time to showing guest instructors the city and the oil fields. The visitors seemed to appreciate our hospitality and several referred to this phase of the summer activities with evident satisfaction.

A special Sunday service was held in Convocation Hall with the Reverend Dr. Caird as speaker. The excellent attendance suggests the desirability of including it as a regular feature of the Special Events Program. The balance over expenses of the collection, \$45, was turned over to the Students' Union Building Furnishing Fund.

**Report of the Director of the Department of Extension,  
Mr. Donald Cameron**  
*Statistical Survey*

*Lectures*

University teaching staff .....	528	
Department of Extension staff .....	185	
Aggregate attendance .....		54,992
Number of radio talks:		
Extension staff .....	56	
Teaching staff .....	168	

<i>Conference and Short Courses</i> .....		3,468
See Table XXV.		

*Visual Instruction*

Number of times lantern loaned .....	60	
Film-slides and miniature projectors loaned .....	70	
Sets of lantern slides sent out .....	148	
Sets of miniature slides sent out .....	335	
Number of times slides used .....	445	
Aggregate attendance lantern lectures .....		20,028
Film-strips sent out .....	2,640	
Number of times film-strips used .....	1,524	
Aggregate attendance film-strips .....		55,143
Sets of moving picture films sent out from Dept. ....	3,814	
Number of reels in sets sent out .....	16,368	
Number of reels from Branch Libraries .....	5,988	
Number of showings given with films from Dept. ....	4,869	
Number of showings from Branch Libraries .....	1,937	
Aggregate attendance, moving pictures .....		499,325
Aggregate attendance Branch Libraries film showings .....		184,780

*Library and Debating Service*

Number of travelling libraries in use .....	90	
Number of times sent out:		
Regular libraries .....	179	
Special libraries .....	170	
Recorded circulation .....		18,013

*Open Shelf circulation*

Books:		
Adult .....	38,731	
Juvenile .....	8,838	
Banff School .....	6,378	
Plays .....	2,882	
Periodicals and pamphlets .....	3,926	
		60,755
Number of package libraries for debaters sent out .....		80

*Study Group Material*

Number of Sets of Citizen Forum Bulletins sent out (weekly) .....	175	
Total number of study bulletins sent out .....		3,000
Number of sets of other study group material sent out .....		20



### *New Canadian Plays and Soil Mechanics*

Number of copies of New Canadian plays sold .....	385
Number of copies of Proceedings of Soil Mechanics and Concrete course sold .....	120

### *Publications*

Press Bulletin, Seasonal Notes .....	10,000	
Press Bulletin, Feeders' Day Program .....	2,000	
	<hr/>	12,000
Agricultural bulletins sent out during the year .....	26,637	
Mimeo. circulars and other bulletins .....	500.00	
	<hr/>	27,137
Total number of bulletins distributed since inception of service .....	495,799	
University News Letter:		
Number of issues .....	13	
Circulation 13 x 220 .....		2,860
The New Trail—number sent out .....		13,930

### *Recapitulation*

Total aggregate attendance at lectures, conferences and short courses, lantern slide lectures, film-strip programmes, moving pictures, Circulating Film Exchange .....	817,516
Total circulation of travelling libraries, books, pamphlets, periodicals, plays, sets of study group material, New Canadian plays, package libraries for debaters, Citizens' Forum bulletins, Proceedings of Soil Mechanics and Concrete Course .....	82,373
Total circulation of Press Bulletins, Agricultural publications, News Letter, New Trail .....	55,927

### *Conclusion*

This report\* brings to a close the thirty-seventh year of University extension in the province of Alberta. The manifold ramifications of the extension programme reflect the intimate relationship of the University to all phases of the commercial, industrial, educational and cultural life of the province.

The rapid increase in the number of specialized short courses is a reflection of the increasing complexity of modern society and of the growing maturity of this province in particular. Gratifying as these developments are, probably the most significant aspect in terms of permanent values is the growth of these activities which have to do with the art of living. So long as interest in the creative arts continues to be high, so long will the University's work continue to flourish in a fruitful soil.

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\*The complete Annual Report on Extension Activities of the University of Alberta for the year ended March 31, 1950, which includes a report on the 1949 session of the Banff School of Fine Arts, is available in printed form.



Table XV.—Short Courses, Conferences and Classes Arranged and Organized by the Department of Extension

Course, Conference, Class	Sponsored by	Held at	Dates	Duration (days)	Attendance
1. Child Care and Development	School of Nursing and Faculty of Medicine	Edmonton	April 20-22	3	76
2. Recreational Leadership	Health and Recreation Branch, Dept. of Education and Edmonton Recreation Commission	Edmonton	May 2-14	13	25
3. Short Course—Librarians of Small Libraries	University of Alberta and Edmonton Public Library	Calgary	May 9-12	4	28
4. 11th Annual Refresher Course—Municipal Administration	Alberta Association of Municipal District Sec.-Treasurers and Dept. of Municipal Affairs	Edmonton	May 25-27	3	55
5. First Mud School	Canadian and American Association of Oil Well Drilling Contractors and the Alberta Petroleum and Natural Gas Conservation Board	Edmonton	May 16-27	12	62
6. Second Mud School	Alberta School Trustees Association and Alberta Divisional Secretaries' Association	Edmonton	May 30-June 10	12	86
7. 5th Annual Refresher Course—School Administration	Treasurers' Association	Edmonton	May 31-June 2	3	77
8. 31st Annual Farm Young People's Conference	Faculty of Agriculture, School of Household Economics and School of Nursing	Edmonton			
9. Community Life Conference	District Community Organizations	Edmonton	June 3-10	8	173
10. " "	" "	Sask. Island Lutheran Camp	July 2-5	4	126
11. " "	" "	Bear Lake Sports Ground	July 7-10	4	146
12. 5th Annual Refresher Course—Sanitary Inspection	Sanitary Inspector's Section of the Alberta Public Health Association and Faculty of Agriculture	Edmonton	July 13-17	5	287
13. Extension Methods and Techniques	Canadian Association of Adult Education	Edmonton	Sept. 14-17	4	19
14. Portrait	" "	Banff	Oct. 3-14	12	80
Community Art Classes:	Department of Fine Arts	Edmonton	Oct. 12-April 14	24 wkly lects.	12
15. Life Drawing	" "	Edmonton	" "	24 "	13
16. Composition	" "	Edmonton	" "	24 "	13
17. Anatomy	" "	Edmonton	" "	24 "	12
18. Water Color	" "	Edmonton	" "	24 "	11
19. Life Drawing	" "	Edmonton	" "	24 "	15
20. Composition	" "	Edmonton	" "	24 "	19
21. Water Color	" "	Edmonton	" "	24 "	5
22. Still Life—Water Color	" "	Edmonton	Oct. 12-Dec. 9	9	15
23. Mixed Technique	" "	Edmonton	Oct. 12-April 14	24 "	7
24. Mixed Technique	" "	Edmonton	" "	24 "	10
25. Tuesday a.m. (a)	" "	Edmonton	" "	24 "	8
26. Tuesday a.m. (b)	" "	Edmonton	" "	24 "	8
27. Thursday a.m.	" "	Edmonton	Oct. 12-Dec. 9	9	5
28. Still Life Oil	" "	Edmonton	Oct. 12-April 14	24 "	12
29. Freshend Perspective	" "	Edmonton	" "	24 "	7

30. Community Art Classes	Brooks Art Club	Brooks	Oct. 13-March 30	26	"	20
31. " "	Medicine Hat Art Club	Medicine Hat	Oct. 14-April 1	36	"	30
32. " "	Lethbridge Art Club	Lethbridge	Jan. 10/50-May 23	20	"	15
33. " "	Macleod Art Club	Macleod	Feb. 13/50-May 22	15	"	15
34. " "	Blairmore Art Club	Blairmore	March 1/50-June 25	23	"	25
35. " "	High River Sketch Club	High River	Oct. 22-April 1	40	"	20
36. " "	Didsbury Art Club	Didsbury	Oct. 19-March 29	21	"	12
37. " "	Olds Art Club	Olds	Oct. 19-March 27	21	"	15
38. " "	Red Deer Art Club	Red Deer	Dec. 8-April 6	30	"	35
39. " "	Wetaskiwin Art Club	Wetaskiwin	Nov. 18-March 31	18	"	12
40. " "	Lacombe Art Club	Lacombe	Oct. 27-March 30	20	"	25
41. " "	Ponoka Art Club	Ponoka	" "	20	"	20
42. " "	Canrose Art Club	Canrose	Nov. 21-March 27	17	"	15
43. " "	Jasper Art Club	Jasper	Nov. 12-March 18	15	"	20
44. " "	Vegreville Art Club	Vegreville	Oct. 7-March 31	32	"	25
45. Hospital Administration	Faculty of Medicine and School of Nursing					
46. Choral Leadership	Department of Extension	Edmonton	Jan. 30-March 10	34	"	31
47. Music Appreciation	" "	Red Deer	Feb. 27/50-May 1	10	"	41
48. Accounting I	Reg. Institute of Indus. Accountants	Edmonton	Feb. 20/50-April 24	10	"	61
49. Accounting II	" "	Edmonton	Oct. 10-March 20	20	"	29
50. Business Mathematics	" "	Edmonton	" "	20	"	29
51. Fundamentals of Cost Accounting	" "	Edmonton	" "	20	"	30
52. Accounting I	" "	Edmonton	" "	20	"	17
53. Accounting II	" "	Calgary	" "	20	"	26
54. Business Mathematics	" "	Calgary	" "	20	"	18
55. Fundamentals of Cost Accounting	" "	Calgary	" "	20	"	25
56. Paint Power	" "	Calgary	" "	20	"	12
57. Asphalt Paving	Faculty of Engineering	Edmonton	Jan. 27-Feb. 24	5	"	30
58. Forest Conservation	Dominion Dept. of Natural Resources and Development (including National Parks Services and Dominion Wildlife Division) and the Provincial Dept. of Lands and Forests.	Banff	Feb. 13-18/50	6	"	80
59. Wildlife Management	N.F.B. and Community Organizations	Banff	Feb. 6-25/50	20	"	36
60. Film Workshop	" "	Banff	Feb. 27-March 11	13	"	37
61. " "	" "	Red Deer	Feb. 1	1	"	200
62. " "	" "	McLennan	Feb. 8	1	"	63
63. " "	" "	Peace River	Feb. 9	1	"	76
64. " "	" "	Grande Prairie	Feb. 13	1	"	66
65. Make-up Class	Catholic Youth Organizations	Dawson Creek	Feb. 15	1	"	73
66. Drama Workshop	Local Drama Organizations	Edmonton	Jan. 30-Feb. 27/50	5 wkly lects.	"	15
67. " "	" "	Raymond	March 6-8/50	3	"	150
68. " "	" "	Olds	March 4-16/50	3	"	20
69. " "	" "	Parkland	Feb. 20-22/50	3	"	15
70. Preliminary Short Course in Painting	University of Alberta	Sedgewick	March 21-24/50	4	"	50
71. 17th Annual Session of the Banff School of Fine Arts	" "	Banff	June 27-July 9	13	"	30
		Banff	July 11-Aug. 20	40	"	488

## **Report of the Director of the Provincial Laboratory of Public Health, Dr. R. M. Shaw**

The varied activities of the laboratory, I think, are rather clearly depicted in the appended tables. The demands on the laboratory were quite similar to those of previous years, but it will be noted there was a moderate increase of total numbers of specimens examined—173,506 as compared to 161,103 in 1948, thus registering an increase of 12,403 (7.7 per cent) for the year. A reference to Table XVI will show that increases were quite evenly distributed among the majority of tests offered—only in the serological tests for syphilis is a remarkably large increase noted. Tests respecting the sensitivity of bacteria to the various antibiotics in current use were more frequently requested. While the numbers of these tests are still small yet they are more than double those of previous years.

During the years 1948-49, the laboratory in common with other provincial laboratories submitted to a survey in relation to serological tests for syphilis. Some two hundred bloods were distributed from Ottawa and the results of each laboratory compared with those of the control, viz., the Laboratory of Hygiene, the Department of National Health and Welfare, Ottawa. Our laboratory made a very creditable showing in that on standard tests of sera from syphilitic patients under treatment the result was within 3 per cent of that of the control while for negative specimens the corresponding figure did not exceed 0.5 per cent.

Two technicians were granted leave for special training in their particular spheres of work.

Miss Jessie Cowles employed on tissue pathology received instruction and gained experience in special tissue sectioning and staining at the Banting Institute in Toronto and the University of Montreal in Montreal.

Miss Ethel Shelene, with funds provided for the Dominion Health Grants, was given a refresher training of three weeks' duration in serology at the Laboratory of Hygiene, Ottawa, and visited the public health laboratories of Quebec and Ontario situated respectively in Montreal and Toronto for purposes of observing the serological technique of these large laboratories in routine operation.

The Southern Branch, mentioned in last year's report as under construction on the grounds of the Central Alberta Sanatorium, was completed and ready for occupation in December 1949. Doors were opened for service to the public on January 3rd, 1950. This branch is undertaking for the south of the province work almost identical in scope with that done in Edmonton.

Dr. Dennis Shute, who arrived from England during the year, was appointed Director. At the opening he was supported by a staff of ten persons whose special training had been received in the main laboratory in Edmonton.

At the close of 1949 construction of the Alberta Public Health Institute was well advanced. When completed it will house the Provincial Laboratory.

It is felt that at this time it might serve a useful purpose to introduce a table showing the growth of work during the years the Provincial Laboratory of Public Health has been housed in the East Wing of the Medical Building, viz., 1921-1949. Removal to the new quarters in the Alberta Institute of Health it is expected will take place late in the summer of 1950. Table XVII shows the numbers and kinds of specimens examined every fourth year beginning with the year 1922.

In conclusion it is a pleasure to record the very efficient and cheerful support which has been given at all times by the staff.

**Table XVI.—Work Performed in the Provincial Laboratory During the Year 1949**

	Total 1948	Total 1949	Increase	Decrease
Sputum Examination .....	768	973	205	.....
Diphtheria and Haemolytic Streptococci.....	3,713	4,704	991	.....
Typhoid Fever (Agglutination Test).....	1,698	2,118	420	.....
Milk .....	1,278	1,125	.....	153
Water .....	4,608	5,190	582	.....
Guinea pig inoculations .....	1,886	1,716	.....	170
Miscellaneous Bacteriology .....	6,805	7,057	252	.....
Blood Cultures .....	764	780	16	.....
Enterobacteria and Intestinal Parasites.....	1,362	1,079	.....	283
Urinalysis .....	10	16	6	.....
Medico-legal (Blood, seminal, etc.) .....	5	7	2	.....
Cerebro-spinal fluids for the Wassermann Test .....	2,958	3,043	85	.....
Bloods for the Quantitative Kahn Test.....	2,815	2,843	30	.....
Bloods for the Wassermann Test .....	10,322	11,286	964	.....
Bloods for the Standard Kahn Test .....	9,992	10,903	911	.....
Bloods for the Presumptive Kahn Test.....	74,635	85,230	10,595	.....
Smears for Gonococcus .....	14,202	12,701	.....	1,501
Cultures for Gonococcus .....	2,897	1,788	.....	1,109
Van Den Bergh determinations .....	189	106	.....	83
Pathological Histological material .....	11,089	11,340	251	.....
Blood Sugar Examinations .....	230	159	.....	71
Post Mortem Examinations (Edmonton)...	367	321	.....	46
Post Mortem Reports (Outside points).....	.....	137	137	.....
Ascheim Zondek Tests .....	472	737	265	.....
Comparative Series .....	8	13	5	.....
Fluids for Cancer Cells .....	116	177	61	.....
Cancer Cytology .....	.....	36	36	.....
Bone Marrows .....	56	40	.....	16
Cerebro-spinal fluid, examinations (Colloidal Gold, Pandy) .....	3,233	3,426	193	.....
Bacteriological examinations (P.M.).....	159	67	.....	92
B. abortus examinations (Agglutination Test) .....	1,719	2,118	399	.....
B. tularensis (Agglutination Test) .....	1,698	2,118	420	.....
B. melitensis (Agglutination Test) .....	3	.....	.....	3
Cattle Blood (Bang's disease Agglutination Test) .....	1,046	150	.....	896
<b>Total.....</b>	<b>161,103</b>	<b>173,506</b>	<b>16,826</b>	<b>4,423</b>

Table XVII.—Work Performed in the Provincial Laboratory of Public Health, 1922-1949

	1922	1926	1930	1934	1938	1942	1946	1949
Sputum for T.B.	451	572	714	677	858	651	768	973
Diphtheria and Haemolytic Streptococci	1,229	663	2,408	722	2,226	2,289	1,788	4,704
Miscellaneous Bacteriology	837	2,035	2,525	2,590	3,504	3,750	5,865	8,916
Milks	628	1,061	1,365	2,096	1,309	1,108	912	1,125
Waters (Bacteriological)	412	1,381	1,955	1,421	1,463	2,649	2,570	3,382
Typhoid and Paratyphoid Agglutinations	217	142	322	264	627	437	881	2,118
Tularæmia Agglutinations	.....	.....	.....	136	623	436	881	2,118
Brucella Agglutinations	61	.....	.....	223	623	436	881	2,118
Mothers Milk	.....	34	42	8	1	1	.....	.....
Urinalysis	.....	.....	512	121	112	95	34	16
Medico-Legal Miscellaneous	.....	6	17	18	25	5	9	7
Van den Bergh	.....	1,304	131	4,023	3,642	1,511	288	106
Icterus Index	.....	1,304	2,909	31	.....	.....	.....	.....
C.S.F. Colloidal Gold and Pandey	.....	.....	.....	1,321	1,941	2,099	3,284	3,426
Post Mortem Bacteriology	.....	.....	.....	35	128	52	89	67
Ascheim Zondek	.....	.....	.....	95	167	314	383	737
C.S.F. Wassermann	.....	.....	.....	.....	.....	.....	3,097	3,043
Blood Wassermann	{ 5,008	10,159	13,541	20,316	30,530	30,851	9,221	11,286
Presumptive Kahn, Blood	.....	.....	.....	.....	.....	40,611	9,009	85,230
Standard Kahn, Blood	.....	.....	.....	.....	.....	.....	8,697	10,903
Quantitative Kahn, Blood	.....	.....	2,904	3,441	4,877	7,317	1,556	2,845
Smears for Gonorrhœa	1,346	2,270	6,168	3,608	9,425	6,243	17,577	12,701
Surgical Pathology	1,501	4,495	80	97	109	124	9,321	11,340
Blood Smears	.....	.....	112	202	249	201	154	159
Post Mortems (Edmonton)	.....	.....	.....	.....	.....	.....	280	321
Post Mortems (outside points)	.....	.....	.....	.....	.....	.....	.....	137
Medico-legal Post Mortems	.....	.....	.....	.....	.....	.....	.....	.....
Comparative Series	.....	.....	.....	.....	.....	.....	.....	.....
Fluids for Cancer Cells	.....	.....	.....	.....	.....	.....	.....	.....
Bone Marrows	.....	.....	.....	.....	.....	.....	.....	.....
Cancer Cytology	.....	.....	.....	.....	.....	.....	.....	.....
Typhoid Vaccine (c.c.)	1,825	110,000	6,850	3,300	9,750	4,920	.....	.....
Autogenous Vaccine (c.c.)	.....	.....	3,725	1,300	625	250	575	600
Stock Vaccine (c.c.)	{ 575	80,000	.....	.....	.....	275	75	.....
Polio Serum (Bottles)	.....	.....	342	86	315	12	.....	.....
*Chicken Bloods	.....	.....	45,719	48,265	.....	.....	.....	.....
Chicken Blood Containers	.....	.....	14,593	74,321	.....	.....	.....	.....
Sera and Vaccine distributed (pkgs)	.....	.....	21,909	10,844	18,052	34,966	39,512	59,303
Cattle Bloods	.....	.....	161	761	2,384	1,560	1,421	150

\*Chicken bloods done by special staff employed for the purpose and paid for by charges for the test.



Report of the Director of the Provincial Industrial Laboratories,  
Dr. J. A. Kelso

Table XVIII.—Examinations and Analysis

Acid .....	3	Gasoline .....	19
Agate .....	1	Glauber salts .....	16
Alfalfa meal .....	8	Glass .....	2
Aluminum .....	2	Gold .....	3
Alum .....	1	Grain .....	5
Antifreeze .....	15	Gravel .....	6
Ash .....	5	Grass .....	3
Asphalt .....	13	Granite .....	2
Babbit metal .....	1	Grease .....	1
Baking soda .....	3	Gypsum .....	5
Bitumen .....	3	Hair .....	1
Blood .....	67	Hair lotion .....	3
Bones .....	30	Honey .....	1
Bone meal .....	5	Hoof meal .....	1
Brain, for alcohol .....	28	Hydraulic fluid .....	2
Brick .....	2	Industrial Chemicals .....	36
Bread .....	1	Insect .....	1
Brine .....	2	Insecticides .....	5
Briquettes .....	20	Iron pyrites .....	12
Breakfast cereal .....	3	Iron oxide .....	3
Building boards .....	1	Iron .....	6
Buttermilk .....	2	Jam .....	1
Butter .....	5	Kerosene .....	3
Caster Oil .....	1	Lard .....	1
Cake mix .....	4	Liquor, detailed for Liquor Con- trol Board .....	37
Cement .....	8	Liquor, male from Alberta Liquor Control Board .....	1085
Calculii .....	2	Liquor, from breweries .....	55
Chlorine compounds .....	4	Liquor, miscellaneous .....	10
Clay .....	21	Liquor, police samples .....	62
Cleanser .....	2	Liquids .....	4
Clothes .....	11	Lime .....	2
Coal .....	86	Limestone .....	13
Coke .....	3	Machine parts .....	13
Concrete .....	5	Magnesite .....	1
Condiment .....	1	Margarine .....	15
Cream .....	7	Marble .....	1
Deposits .....	20	Marl .....	4
Detergents .....	2	Meat .....	9
Distillers grain .....	6	Meat meal .....	11
Epsom salts .....	2	Medical chemicals .....	3
Egg melange .....	5	Medicine .....	7
Fabric .....	73	Metal .....	5
Fat .....	6	Mica .....	5
Feed, Animal .....	43	Milk .....	33
Poultry .....	23	Minerals .....	6
Concentrates .....	8	Mortar .....	10
Fertilizer .....	1	Mushroom .....	3
Fire exhibits .....	11	Narcotics .....	39
Flour .....	27	Narcotics, O. & N.D. Act ex- hibits .....	217
Fluid .....	2	Nitroglycerin .....	1
Food, human .....	3	Oats .....	2
Fossil .....	1	Obsidium .....	3
Fruit .....	6	Oil: Crude .....	1
Fruit juice .....	6	Lubricating .....	36
Fungii .....	2		
Galena .....	2		
Gas .....	3		



Protective .....	2	Spinal fluids .....	2
Transformer .....	5	Steel .....	56
Fuel .....	11	Stones, precious .....	1
Oil residue .....	1	Syrup .....	3
Ore .....	62	Tallow .....	2
Oyster shell .....	1	Talc .....	1
Paint .....	29	Tankage .....	8
Pear .....	1	Tile .....	1
Pills .....	13	Tea .....	1
Pipe metal .....	3	Turpentine .....	1
Pitch .....	2	Toy .....	3
Plants .....	10	Toadstool .....	1
Plaster .....	3	Urine .....	62
Poison exhibits, miscellaneous.....	24	Varsol .....	1
Poison examinations, human .....	148	Varnish .....	1
Police exhibits, miscellaneous .....	67	Vegetable .....	8
Powder .....	6	Veterinary laboratory exhibits.....	539
Quartz .....	3	Volcanic ash .....	3
Rock .....	98	Water, sanitary .....	1303
Rubber .....	3	Water, poison .....	25
Sand .....	39	Water, Industrial .....	157
Sandstone .....	2	Water, University boiler control	113
Salt .....	4	Wax .....	3
Scale .....	4	Weed killers .....	12
Schist .....	6	Weeds .....	9
Seed Grain .....	11	Wheat .....	95
Sewage .....	2	Engineering materials:	
Shale .....	2	Blanket, electrical .....	2
Sludge .....	7	Blocks, concrete .....	3
Soap .....	10	Concrete cylinders .....	3475
Soap powder .....	12	Electrician gloves .....	152
Soda .....	2	Hood, electrical .....	2
Soda Water .....	1	Hose, electrical .....	2
Soft drink .....	1	Transformer oil .....	
Soils .....	23	Wire rope .....	8
Spice .....	1		
Sterilizing solutions .....	5	Total.....	9146

Engineering materials were handled in conjunction with departments of Civil and Electrical Engineering. Usual analyses were made for and investigations carried out for the various government departments: Attorney General, Lands and Mines, Health, Provincial Secretary, Agriculture, Veterinary Laboratory, Alberta Liquor Control Board, the latter requiring the Provincial Analyst to have technical control of all beer handled by the Board and to supervise such breweries as operate in Alberta.

Court evidence was given under Provincial and Dominion acts and regulations such as Alberta Liquor Control Act, Opium and Narcotic Drug Act, Excise Act, etc.

Co-operative investigations were handled for Dominion Department of National Health and Welfare and the Workmen's Compensation Board.

Required analyses were made for R.C.M.P. and other police officers and for Provincial Coroners, and at all times the Provincial Analyst is available for court evidence. Analyses and investigations for Veterinary Laboratory of Department of Agriculture have been exceptionally heavy. We are very short staffed for the excessive amount of government work we are called on to do, and it is imperative that staff be increased.



## Date Due \_\_\_\_\_

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